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Gravity Survey along the Lines of Precise Levels throughout Japan by Means of a WORDEN Gravimeter

Part IX. Kyûshû District.

October, 1956

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Gravity Survey along the Lines of Precise Levels throughout Japan by Means of a WORDEN Gravimeter.

Part IX. Kyûshû District.

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1. Introduction

Since the spring of 1951, the writers have been engaged in an extensive gravimeter survey along the entire length of the lines of precise levels throughout Japan by means of a WORDEN gravimeter. The network of the lines of precise levels belonging to the Geographical Survey Institute covers the whole country densely as was shown in Fig. 1 of Part I, and it reaches approximately 20,000 km. in total length. The bench marks are laid at an average distance of 2 km. measured along these level lines. In the present survey, the gravity values have been determined at every other one of these bench marks, that is at intervals of 4 km. The results of the gravimeter measurements that were obtained in the Shikoku, Chûgoku, Kinki, Chûbu, Tôhoku and Kantô Districts have already been published as Parts I, II, III, V, VI, VII and VIII of these serial reports (TSUBOI et al.: 1953, 1954, 1955, 1956). The present report is the ninth in the series and is particularly concerned with the results obtained in the Kyûshû District (TSUBOI et al: 1954).

2. Lines of Precise Levels in the Kyûshû District

The Kyûshû District is essentially Kyûshû Island, situated in the south-western part of the Japanese islands as shown in Fig. 1.

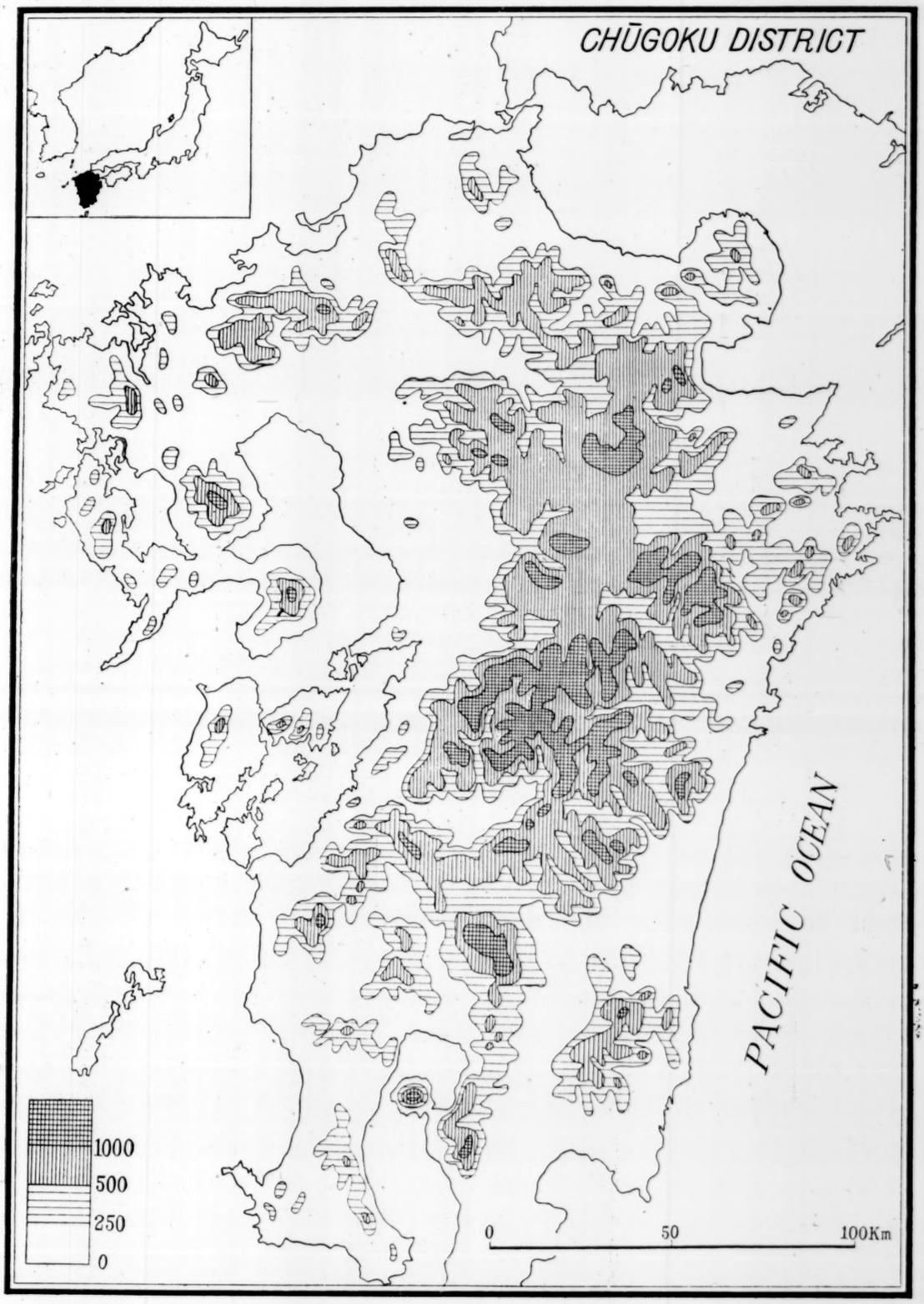

Fig. 1. Topographical Map of the Kyûshû District.

The District is roughly a pentagon in shape, more or less elongated in the NS direction. It is approximately 44,500 km² in area. Fig. 1 shows the topography of the District roughly.

Table I.
Number of Gravimeter Stations.

Prefecture		Number
(39)	Fukuoka	67
(40)	Saga	34
(41)	Nagasaki	65
(42)	Kumamoto	103
(43)	Ôita	72
(44)	Miyazaki	92
(45)	Kagoshima	105
	Total	538

The Kyûshû District comprises seven administrative prefectures, viz., (39) Fukuoka, (40) Saga, (41) Nagasaki, (42) Kumamoto, (43) Ôita, (44) Miyazaki and (45) Kagoshima. The network of the lines of precise levels in this District, along which the gravity survey was made, is shown in Fig. 2, together with the prefecture boundaries. The level lines are altogether about 2,200 km. in length and the gravity values were determined at 538 points along them. In this number are also included several identifiable points such as local weather stations, of which the heights are known with sufficiently high accuracy for the purpose of our gravity reductions. The number of points at which the gravity values were determined in each of the prefectures is given in Table I.

The gravimeter survey in this District was made in various periods, namely, in May, 1953, and in Feb. and May, 1954.

3. Methods of Measurements and Reductions

Since the methods of measurements and reductions are the same as those already stated in the previous reports, no repeated description will be necessary, nor further comments need be added. The one important thing which must be mentioned is that no attempt has been made here, as in the previous reports, to adjust the measured gravity values by simultaneous net calculations. The whole length of the lines of measurements is actually a connected chain of many small gravimetric loops, for each of which the drift rate of the gravimeter spring was determined severally. These small loops are numbered as illustrated in Fig. 2. After the relative gravity values at the sites of bench marks situated along each of the loops were determined separately, the results were merely connected in succession. This procedure is admittedly not a kind from which very accurate results can be expected, but unavoidable circumstances regarding transportation facilities on the one hand and the rather hasty demand for getting a picture of the distribution

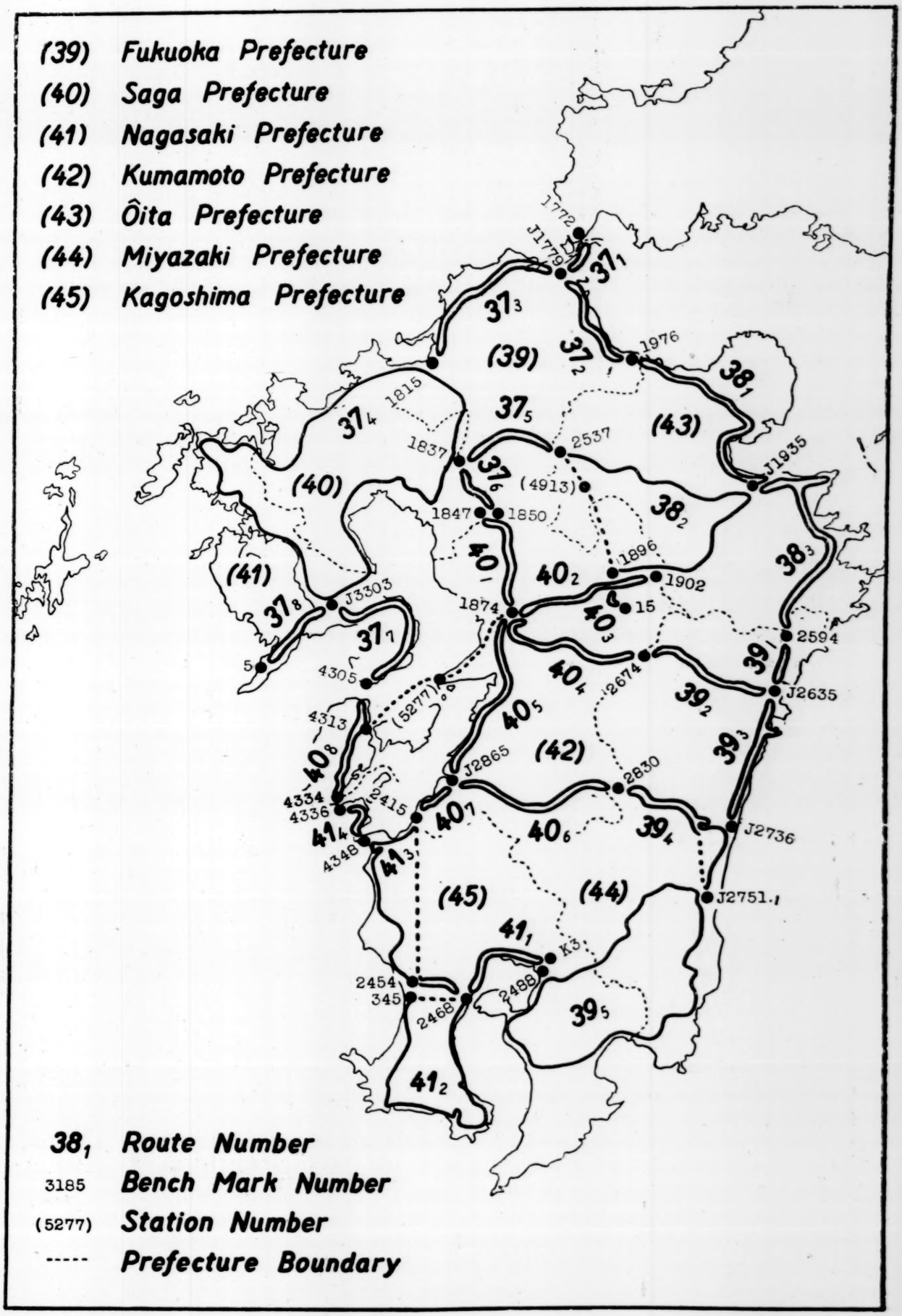

Fig. 2. Lines of Precise Levels in the Kyûshû District with the Prefecture Boundaries.

of the gravity anomalies on the other, caused the adoption of this procedure as the second best. Although we do not claim that the results given in this report are of the highest attainable accuracy, it is not likely that any difference in the procedure of reduction will alter the final results sensibly.

The Kyûshû District is essentially an island separated from Honshû, the main island, by a strait less than 1 km in width which is famous for its swift tidal currents. Beneath this strait, a highway goes through a tunnel and connects Honshû and Kyûshû. It is by comparing the gravity values at the two bench marks on the opposite sides of the tunnel that Honshû and Kyûshû were connected gravimetrically. The result of these connection measurements is summarised in Table II.

Table II. Gravimetric Connection of the Kyûshû and Chûgoku Districts.

B.M.	Date	Time		SD	$SD\times 0.9150$	$E.T.$	h		Drift		δg	979.
		h m	h m									
1779 (Kyûshû)	V 13, 1953	9 25	0 00	1136	1039	5	31	1075	0	1075	—	67488
1772 (Honshû)	〃	11 24	1 59	2224	2035	17	−8	2044	19	2025	+950	68438 (given)
1779 (Kyûshû)	〃	12 47	3 22	1155	1057	18	33	1108	33	1075	—	67488

It is already known that the value of g at B.M. 1772 (Honshû) is 979.68438, and by means of this tie between Kyûshû and Honshû, g at B.M. 1779 (Kyûshû) has been determined to be 979.67488. The gravity values at all other stations in Kyûshû are referred to the value at this point.

Our WORDEN gravimeter has been working with an admirable perfection, only the rate of drift of the gravimeter spring differed notably from one loop to others. It will be interesting to compare the rates for various loops given in Table III.

4. Results

The gravity values at all the stations in this District are given in Table IV–VIII for each of the loops separately. In Table IX–XV, the materials are arranged synoptically according to the seven prefectures of the District individually. The explanations of the tables precede them. The lines of equal BOUGUER anomalies based on the International Gravity Formula are shown in Fig. 3 with 2 mgal. intervals. The figure is in the pocket attached to the back cover of the present report. The locations of the contour lines are accurate where they meet the lines

of precise levels, but obviously no great accuracy can be claimed for those in the intervenient parts. Fig. 4 is a simplified map showing the same distribution with 5 mgal. intervals.

Reserving the detailed and quantitative geophysical interpretations of the distribution of BOUGUER anomalies for future studies, we will briefly enumerate the especially notable facts to be observed in Figs. 3 and 4.

Table III. Apparent Rate of Drift of the Gravimeter Spring for Various Loops.

Route	Residual (0.01 mgal.)	Time (hour)	R (mgal./hour)
37_1	33	3.4	0.0971
37_2	42	6.0	0.0700
37_3	75	10.0	0.0750
37_4	178	34.4	0.0517
37_5	39	5.6	0.0696
37_6	28	3.0	0.0933
37_7	68	9.7	0.0701
37_8	36	6.8	0.0529
38_1	106	13.0	0.0815
38_2	107	20.9	0.0512
38_3	48	14.7	0.0327
39_1	15	3.3	0.0455
39_2	82	13.0	0.0631
39_3	40	8.0	0.0500
39_4	92	15.3	0.0601
39_5	118	29.0	0.0407
40_1	−5	5.4	−0.0093
40_2	35	6.8	0.0515
40_3	33	5.5	0.0600
40_4	105	12.5	0.0840
40_5	60	8.7	0.0690
40_6	63	8.4	0.0750
40_7	23	3.2	0.0719
40_8	122	21.8	0.0560
41_1	40	8.7	0.0460
41_2	92	12.6	0.0730
41_3	43	16.4	0.0262
41_4	9	5.8	0.0155

1) As a whole, the BOUGUER anomaly increases systematically toward the western and northern coasts of the island. The +30 mgal. line, for instance, runs approximately along the coast line and beyond that line, the anomaly increases seaward. Gravity pendulum data obtained by N. KUMAGAI (1942) at a few points on the Gotô Islands also indicate this increase. The sea to the west of the island is a marginal part of the Yellow Sea. Since the Sea is only a few hundred meters in depth, it has been believed to be "continental" rather than "oceanic" in character. But the fact that the BOUGUER anomaly does

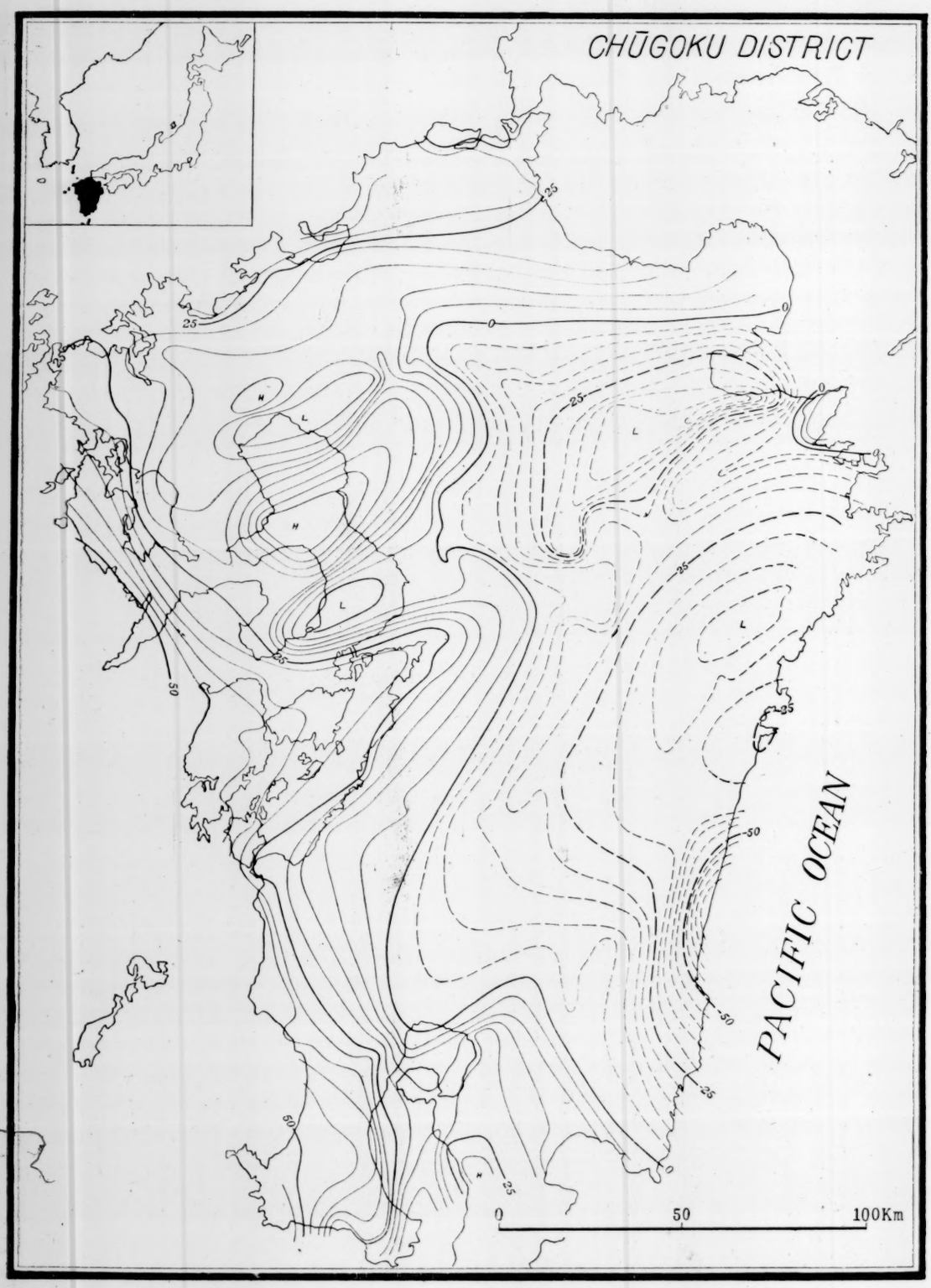

Fig. 4. Simplified Map Showing the BOUGUER Anomaly Distribution in the Kyûshû District (5 mgal. interval. Full line: positive anomaly, Broken line: negative anomaly.)

increase notably seaward here might suggest that this is perhaps not the case.

According to the gravity measurements in China by P. R. LEJAY (1936), the BOUGUER anomaly increases toward the Yellow Sea also. The increase of the anomaly toward the Yellow Sea on both sides appears to mean that the denser subcrustal material lies closer to the earth's surface under the Yellow Sea than it does in the normally "continental" area, or in other simple words that the Sea is "oceanic". But why its shallowness?

That the Sea here is shallow is likely to mean that a very thick layer of deposit or sediments of loose material covers the bottom of the Sea, which would otherwise be deep as shown in Fig. 5. A large river, the Yang-tze-kiang, flows into the Yellow Sea, transporting a tremendous amount of sand, mud, clay, etc. S. HAYAMI, estimates the annual mass transported by the river is well over 3×10^8 tons/year. If this enormous quantity of deposits is evenly spread over an area of 5×10^5km^2 to form a layer having the density 2.0 on the sea bottom, the rate of growth of this sedimentary layer will be about 3×10^{-1}m/year. So in the course of 10^7 years, it will easily grow up to attain a thickness of 3×10^3m and it is not difficult to make this part appear as if it were a part of a continent. The writers do not believe this is an absurd estimation.

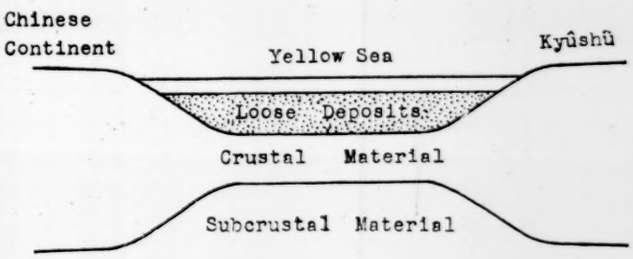

Fig. 5. Profile Showing the Supposed Underground Structure of the Yellow Sea.

2) The approximate parallelism of the isoanomaly line and the western coast line of the island fails at about the middle of the island where the gravity high is seen to protrude from west to east into the backbone area of the island. This ridge of gravity high can be traced still further eastward, although the gravity high itself gradually decreases in amount, even becoming negative. A little to the east of the central axis of the island, there are two areas of negative gravity anomaly on the northern and southern sides of this ridge of gravity high. At this place, the gravity high takes a minimum value so that the distribution of anomaly here represents a saddle form. After this saddle point is passed, the gravity high begins to increase again in amount eastward. Thus, this ridge of gravity high is very clearly seen to run

across the island of Kyûshû in the E–W direction. Along the northern side of this ridge, the anomaly decreases steeply northward. It is about along this zone that the Median Tectonic Line has been supposed to run, although its exact location has not been possible geologically, owing to thick volcanic ejecta which cover the area widely. Our gravity survey has established the existence of this line beyond doubt, although nothing definite can yet be said as to the geophysical structure that will cause the observed gravity anomalies. It is interesting to note that small earthquakes occur frequently throughout this zone.

3) Along the northern coast of Kyûshû, the isoanomaly lines are approximately parallel to the coast line as was stated before. The area lying between this belt of parallelism and the ridge of gravity high mentioned in the last section is triangular in form and the isoanomaly lines are rather irregularly shaped within it. From this point of view, the whole area of Kyûshû may be divided into three parts, A, B and C, as shown in Fig. 6. In area A, the isoanomaly lines are approximately parallel to the northern coast line of the island; in area B, the lines are irregularly shaped; in area C, the trends of the isoanomaly lines are more or less systematic. It is noteworthy that the isoanomaly lines which run in the E–W direction in area A and which are parallel to the northern coast line of the island turn sharply northward near the eastern end of the area and are connected in a natural way with the isoanomaly lines in the Chûgoku District. It is also noteworthy that there is no gravimetric indication that the ridge of gravity high bounding the areas B and C continues to run further westward into the Yellow Sea.

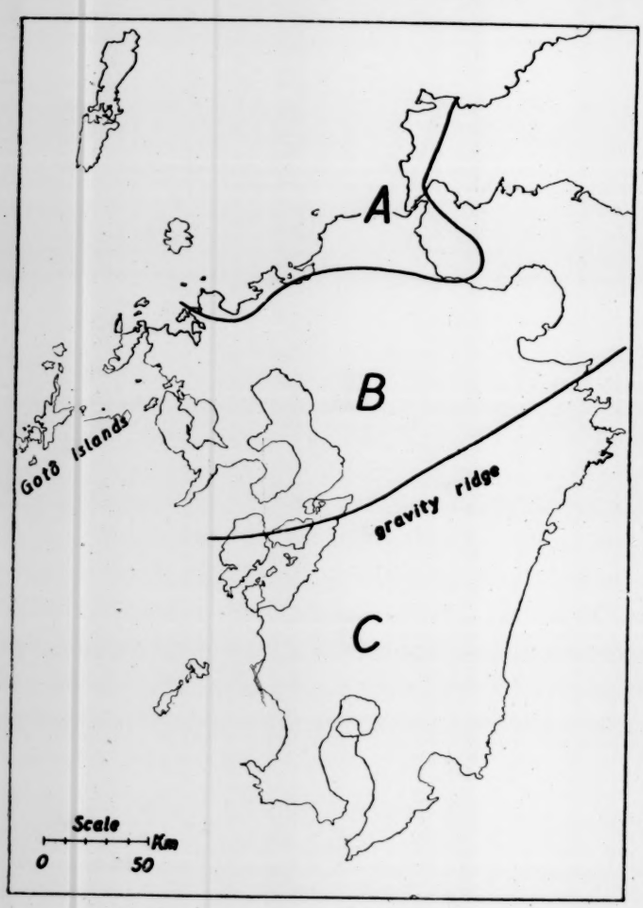

Fig. 6. A, B and C Areas in the Kyûshû District.

4) In area C, the gravity anomaly decreases more or less systematically eastward and at a certain point on the east coast, an anomaly of -72 mgals. is found. The isoanomaly lines are approximately elliptic around this minimum and suggest a conspicuous depression of the earth's crust at this place. It is here that many good sized earthquakes occur frequently.

5. Acknowledgements

We cannot close this report without expressing our sincere gratitudes to the many officials and individuals who have helped us in various ways in accomplishing this survey. It is almost impossible to mention the names of all these persons. Particularly, we wish to thank Mrs. S. INOUE and Mrs. K. SEKI who have helped us greatly in numerical computations and in preparing the present paper. The necessary expenses of executing the present survey were partly defrayed from a Grant in Aid for Scientific Research from the Ministry of Education.

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".....Part VIII. Kantô District."
ibid., Part VII.

Explanation of Tables

Tables IV–VIII Results along the Routes

Pref.....Prefecture
No. .....Number of Measurement
B.M.....Bench Mark Number
Time .....Time of Measurement
$\sum \delta T$ .....Net Time needed to arrive at the Station from the Starting Point
LD.....Large Dial Reading
SD.....Small Dial Reading
$0.9150 \times SD$ ...Conversion of Small Dial Reading to 0.01 mgal.
h .....Height of the Gravimeter above the Bench Mark Head
$0.3086 \times h$.....Free-air Reduction to the Bench Mark Head
$E.T.$ .....Correction for the Earth Tides (Factor 1.20)
Drift.....Correction for Drift
$\sum \delta g$.....Gravity Difference from the Starting Point
g.....Gravity Value (Corrected for Drift and Earth Tides)

Tables IX–XV Synoptic Results for the Prefectures

φ .....Latitude
λ .....Longitude
H.....Height of the Bench Mark above the Sea Level
g.....Gravity Value (Corrected for Drift and Earth Tides)
g_0.....Gravity Value after the Free-air Reduction
g_0''.....Gravity Value after the BOUGUER Reduction
γ.....Normal Gravity
Δg_0.....Free-air Anomaly
$\Delta g_0''$.....BOUGUER Anomaly

Table IV. Results along the Routes 37_1, 37_2, 37_3, 37_4, 37_5, 37_6, 37_7, 37_8. (0.01 mgal.).

Route 37_1 B.M.J. 1779—B.M. 1772—B.M.J. 1779.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	9.71 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
39	3811	J. 1779	V 13	9 25	0 00	1136	1039	102	31	5	0	0	67488	72
〃	3812	1778	〃	9 39	14	1346	1232	56	17	11	2	183	67671	〃
〃	3813	1774	〃	10 04	39	1554	1422	71	22	11	7	373	67861	〃
〃	3814	(7)	〃	10 19	54	2329	2131	52	16	11	9	1074	68562	〃
34	3815	1772	〃	11 24	1 59	2224	2035	−25	− 8	17	19	950	68438	〃
39	3816	*	〃	11 52	2 27	3107	2843	75	23	19	24	1786	69274	〃
〃	3817	J. 1779	〃	12 47	3 22	1155	1057	106	33	18	33	0	67488	〃

* Middle of the Kammon High Way, 380m from Moji.

Route 37_2 B.M.J. 1779—B.M. 1976—B.M.J. 1779.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.00 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
39	3817	J. 1779	V 13	12 47	0 00	1155	1057	106	33	18	0	0	67488	72
〃	3818.$_1$	1998	〃	13 08	21	0793	0726	50	15	18	3	− 352	67136	〃
〃	3818.$_2$	〃	〃	13 11		6568	6010	〃	〃	18				〃
〃	3819	1996	〃	13 26	36	6955	6364	33	10	18	4	− 4	67484	〃
〃	3820	1994	〃	13 41	51	6611	6049	121	37	15	6	− 297	67191	〃
〃	3821	1992	〃	13 49	59	6644	6079	51	16	15	7	− 289	67199	〃
〃	3822	1990	〃	14 10	1 20	5721	5235	40	12	15	9	−1139	66349	〃
〃	3823	1988	〃	15 21	2 31	5615	5138	72	22	9	18	−1241	66247	〃
〃	3824	1984	〃	15 55	3 05	5329	4876	42	13	3	22	−1522	65966	〃
〃	3825	1982	〃	16 11	3 21	5140	4703	62	19	3	24	−1691	65797	〃

Table IV. (Continued)

Pref.	No.	B.M.	Date 1953	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.00 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
39	3826	1980	V 13	16 23	3 33	4545	4159	51	16	3	25	−2239	65249	72
〃	3827	1978	〃	16 35	3 45	4740	4337	62	19	− 4	27	−2057	65421	〃
〃	3828	1976	〃	16 52	4 02	4711	4311	67	21	− 4	28	−2092	65396	〃
〃	3829	J. 1779	〃	18 48	5 58	7008	6412	103	32	−10	42	0	67488	〃

Route 37_3 B.M.1815—B.M.J.1779—B.M.1815.

Pref.	No.	B.M.	Date 1953	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.50 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
39	3796	1815	V 12	11 38	0 00	3814	3490	98	30	18	0	0	64609	72
〃	3797	1813	〃	11 55	17	4601	4210	47	15	18	2	703	65312	〃
〃	3798	1811	〃	12 10	32	5943	5438	47	15	18	4	1929	66538	〃
〃	3799	1808	〃	12 27	49	6704	6134	76	23	18	6	2631	67240	〃
〃	3800	1806	〃	12 38	1 00	7026	6429	68	21	15	8	2919	67528	〃
〃	3801	1803	〃	13 12	1 34	6425	5879	81	25	15	12	2369	66978	〃
〃	$3802._1$	1801	〃	13 35	1 57	7182	6572	54	17	10	15	3046	67655	〃
〃	$3802._2$	〃	〃	13 44		1203	1101	〃	〃	10				〃
〃	3803	1799	〃	14 36	2 49	1267	1159	64	20	4	21	3095	67704	〃
〃	3804	1797	〃	14 47	3 00	0078	0071	47	15	4	23	2000	66609	〃
〃	3805	1793	〃	16 46	4 59	0923	0845	64	20	− 8	38	2752	67361	〃
〃	3806	1789	〃	17 55	6 08	0866	0792	68	21	−10	46	2690	67299	〃
〃	3807	1787	〃	18 10	6 23	0824	0754	55	17	−10	48	2646	67255	〃
〃	3808	1784	〃	18 37	6 50	1745	1597	89	27	−10	51	3496	68105	〃
〃	3809	1782	〃	19 17	7 30	1420	1299	50	15	−10	56	3181	67790	〃
〃	3810	J. 1779	〃	19 39	7 52	1073	0982	101	31	− 8	59	2879	67488	〃
〃	3829	〃	V 13	18 48		7008	6412	103	32	−10				〃
〃	3830	1815	〃	20 55	9 59	3880	3550	94	29	− 8	75	0	64609	〃

Route 37_4 B.M. 1815—B.M. 1837—B.M. 3355—B.M.J. 3303—B.M.1815.

Pref.	No.	B.M.	Date 1953	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.17 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
39	3831	1815	V 14	10 52	0 00	3924	3590	94	29	13	0	0	64609	72
〃	3832	1818	〃	11 16	24	3580	3276	66	20	13	2	− 325	64284	〃
〃	3833	1820	〃	11 28	36	2950	2699	73	23	13	3	− 900	63709	〃
〃	3834	1822	〃	11 38	46	2302	2106	41	13	17	4	−1500	63109	〃
〃	3835	1825	〃	11 57	1 05	1483	1357	35	11	17	6	−2253	62356	〃
〃	$3836._1$	1828	〃	12 10	1 18	1194	1093	43	13	17	7	−2516	62093	〃
〃	$3836._2$	〃	〃	12 12		7587	6942	〃	〃	17				〃
40	3837	1830	〃	12 28	1 34	7433	6801	70	22	17	8	−2649	61960	73
〃	$3838._1$	1832	〃	12 50	1 56	7721	7065	55	17	19	10	−2390	62219	〃
〃	$3838._2$	〃	〃	12 54		7385	6757	〃	〃	19				〃
39	3839	1835	〃	14 12	3 14	7415	6785	87	27	18	17	−2360	62249	〃
〃	3840	1837	〃	15 30	4 32	5700	5216	68	21	8	23	−3951	60658	〃
〃	3858	〃	V 15	14 53		5852	5355	69	21	16				〃
〃	3859	3363	〃	15 09	4 48	5364	4908	59	18	16	25	−4403	60206	〃
〃	3860	3360	〃	15 37	5 16	5476	5011	43	13	11	27	−4312	60297	〃
〃	3861	3358	〃	15 51	5 30	5470	5005	46	14	11	28	−4318	60291	〃
〃	3862	3355	〃	16 16	5 55	5244	4798	90	28	11	31	−4514	60095	〃
〃	3863	3353	〃	16 30	6 09	4912	4494	36	11	5	32	−4842	59767	〃
40	3864	3351	〃	17 30	7 09	4768	4363	52	16	0	37	−4978	59631	〃
〃	3865	3349	〃	17 47	7 26	5255	4808	57	18	0	38	−4532	60077	〃
〃	3866	3347	〃	18 11	7 50	5702	5217	54	17	0	40	−4126	60483	〃
〃	3867	3345	〃	18 26	8 05	5927	5423	63	19	0	42	−3920	60689	〃
〃	3868	〃	V 16	9 29		6014	5503	61	19	− 3				〃
〃	3869	Saga W.S. *	〃	9 50	8 26	5809	5315	66	20	− 1	43	−4106	60503	〃
〃	3870	3343	〃	10 19	8 55	6365	5824	51	16	− 1	46	−3604	61005	〃
〃	3871	3341	〃	10 36	9 12	7224	6610	47	15	4	48	−2816	61793	〃
〃	3872	3339	〃	10 52	9 28	6800	6222	53	16	4	49	−3204	61405	〃
〃	3873	3336	〃	11 11	9 47	5051	4622	54	17	4	51	−4805	59804	〃
〃	3874	3334	〃	11 32	10 08	4620	4227	55	17	9	52	−5196	59413	〃
〃	3875	3331	〃	11 54	10 30	4643	4248	43	13	9	54	−5181	59428	〃

* Weather Station Bench Mark.

Table IV. (Continued)

Pref.	No.	B.M.	Date 1953	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.17 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
40	3876	3329	V 16	12 52	11 28	4661	4265	44	14	13	59	−5164	59445	73
〃	3877	3327	〃	13 05	11 41	4930	4511	89	27	13	60	−4906	59703	〃
〃	3878	3325	〃	13 18	11 54	4939	4519	40	12	13	62	−4915	59694	〃
〃	3879	3323	〃	13 30	12 06	5687	5204	45	14	15	63	−4227	60382	〃
〃	3880	3321	〃	13 44	12 20	5115	4680	51	16	15	64	−4750	59859	〃
〃	3881	3319	〃	14 01	12 37	5839	5343	71	22	15	65	−4082	60527	〃
〃	3882	3317	〃	14 14	12 50	5761	5271	54	17	15	66	−4160	60449	〃
41	3883	3315	〃	14 56	13 32	6862	6279	58	18	15	70	−3155	61454	〃
〃	3884	3313	〃	15 11	13 47	5866	5367	64	20	15	71	−4066	60543	〃
〃	3885	3310	〃	15 36	14 12	4708	4308	60	19	13	73	−5130	59479	〃
〃	3886	3307	〃	15 52	14 28	4053	3708	60	19	13	75	−5732	58877	〃
〃	3887	3304	〃	16 10	14 46	3689	3375	57	18	13	77	−6068	58541	〃
〃	3888	J. 3303	〃	16 26	15 02	3700	3386	71	22	13	78	−6054	58555	〃
〃	3922	〃	V 18	15 39		2240	2050	72	22	12				74
〃	3923	3301	〃	15 55	15 18	1595	1459	56	17	12	79	−6651	57958	〃
〃	3924	3299	〃	16 11	15 34	2295	2100	56	17	12	81	−6012	58597	〃
〃	3925	3297	〃	16 24	15 47	2811	2572	59	18	12	82	−5540	59069	〃
〃	3926	3295	〃	16 56	16 19	2335	2137	49	15	10	84	−5982	58627	〃
〃	3927	〃	V 19	9 55		2438	2231	〃	〃	− 3				〃
〃	3928	3293	〃	10 09	16 33	2680	2452	54	17	− 3	86	−5761	58848	〃
〃	3929	3291	〃	10 25	16 49	2318	2121	61	19	− 3	87	−6091	58518	〃
〃	3930	3289	〃	10 38	17 02	2891	2645	63	19	− 1	88	−5566	59043	〃
〃	3931	3287	〃	10 54	17 18	3204	2932	64	20	− 1	89	−5279	59330	〃
〃	3932	3285	〃	11 07	17 31	3711	3396	74	23	− 1	90	−4813	59796	〃
〃	3933	3283	〃	11 21	17 45	3470	3175	22	7	− 1	92	−5052	59557	〃
〃	3934	3281	〃	11 36	18 00	3359	3073	−16	− 5	1	93	−5165	59444	〃
〃	3935	3279	〃	11 52	18 16	4246	3885	61	19	1	95	−4331	60278	〃
〃	3936	3277	〃	12 07	18 31	5521	5052	58	18	1	96	−3166	61443	〃
〃	3937	3275	〃	12 18	18 42	5303	4852	55	17	1	97	−3368	61241	〃
〃	3938	3273	〃	12 30	18 54	5943	5438	49	15	4	98	−2782	61827	〃

〃	3939	3271	〃	15 05	21 29	5846	5349	64	20	9	111	−2774	61835	〃
〃	3940	3269	〃	15 19	21 43	5380	4923	69	21	9	112	−3300	61309	〃
〃	3941	3267	〃	15 32	21 56	5899	5398	38	12	10	113	−2834	61775	〃
〃	3942	3265	〃	15 45	22 09	6667	6100	64	20	10	115	−2126	62483	〃
〃	3943	3262	〃	16 13	22 37	4565	4177	40	12	10	117	−4059	60550	〃
〃	3944.1	3260	〃	16 35	22 59	7158	6550	54	17	9	119	−1684	62925	〃
〃	3944.2	〃	〃	16 38		2650	2425	〃	〃	9				〃
〃	3945	3258	〃	16 57	23 18	2847	2605	68	21	9	120	−1501	63108	〃
〃	3946	3255	〃	17 18	23 39	2000	1830	23	7	9	123	−2293	62316	〃
〃	3947	3253	〃	17 57	24 18	2579	2360	67	21	8	126	−1753	62856	〃
〃	3948	〃	V 20	9 22		2712	2481	64	20	0				〃
〃	3949	3250	〃	9 42	24 38	3017	2761	63	19	0	127	−1475	63134	〃
〃	3950	3248	〃	9 57	24 53	3122	2857	36	11	0	129	−1389	63220	〃
〃	3951	3245	〃	10 17	25 13	3257	2980	72	22	0	130	−1256	63353	〃
〃	3952	3243	〃	10 32	25 28	2835	2594	78	24	0	132	−1642	62967	〃
〃	3953	3242	〃	10 42	25 38	2354	2154	57	18	0	132	−2088	62521	〃
〃	3954	3240	〃	11 03	25 59	2393	2190	66	20	0	134	−2052	62557	〃
40	3955	3239	〃	11 34	26 30	2259	2067	15	5	0	137	−2193	62416	〃
〃	3956	3237	〃	11 50	26 46	2044	1870	69	21	0	139	−2376	62233	〃
〃	3957	3235	〃	12 05	27 01	2115	1935	56	17	0	140	−2316	62293	〃
〃	3958	3233	〃	12 19	27 15	2098	1920	69	21	0	141	−2328	62281	75
〃	3959	3231	〃	13 37	28 33	1605	1469	41	13	2	148	−2792	61817	〃
〃	3960	3229	〃	13 52	28 48	1043	0954	24	7	2	149	−3314	61295	〃
〃	3961	3227	〃	14 03	28 59	1441	1319	68	21	2	150	−2936	61673	〃
〃	3962	3225	〃	14 16	29 12	1819	1664	54	17	2	151	−2596	62013	〃
〃	3963	3223	〃	14 32	29 28	2365	2164	52	16	4	153	−2097	62512	〃
〃	3964	3221	〃	14 43	29 39	2998	2743	59	18	4	154	−1517	63092	〃
〃	3965	3219	〃	14 57	29 53	3810	3486	85	26	4	155	− 767	63842	〃
〃	3966	3218	〃	15 08	30 04	3905	3573	60	19	4	156	− 688	63921	〃
〃	3967	3216	〃	15 23	30 19	4092	3744	65	20	4	157	− 517	64092	〃
〃	3968	3214	〃	15 45	30 41	4642	4247	62	19	6	159	− 15	64594	〃
39	3969	3212	〃	15 58	30 54	5114	4679	63	19	6	160	416	65025	〃
〃	3970	〃	V 21	9 08		5235	4790	61	19	1				〃
〃	3971	3210	〃	9 20	31 06	5353	4898	50	15	1	161	519	65128	〃
〃	3972	3208	〃	9 31	31 17	4927	4508	55	17	0	162	129	64738	〃

Table IV. (Continued)

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.17 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
39	3973	3206	V 21	9 48	31 34	5174	4734	−15	− 5	0	163	332	64941	75
〃	3974	3204	〃	10 03	31 49	5222	4778	56	17	0	164	397	65006	〃
〃	3975	3202	〃	10 23	32 09	4974	4551	51	16	0	166	167	64776	〃
〃	3976	3200	〃	10 45	32 31	5055	4625	56	17	0	168	240	64849	〃
〃	3977	3198	〃	11 00	32 46	5239	4794	67	21	0	170	411	65020	〃
〃	3978	3196	〃	11 14	33 00	4805	4397	48	15	0	171	7	64616	〃
〃	3979	3194	〃	11 30	33 16	4387	4014	62	19	0	172	− 373	64236	〃
〃	3980	Fukuoka M.O. *	〃	12 00	33 46	4230	3870	27	8	0	175	− 531	64078	〃
〃	3981	1815	〃	12 39	34 25	4790	4383	94	29	0	178	0	64609	〃

* Meteorological Observatory Seismometer Rome, on the surface of the concrete block for seismometer installation.

Route 37_5 B.M. 1837—B.M. 2537—B.M. 1837.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	6.96 × $\sum\delta T$ Drift	Adjust-ment	$\sum\delta g$	g 979.	Field Note No.
				h m	h m										
39	3848	1837	V 15	9 16	0 00	5830	5334	72	22	− 3	0	0	0	60658	73
〃	3849	2520	〃	9 32	16	7018	6421	20	6	3	2	− 7	1082	61740	〃
〃	3850	2522	〃	9 53	37	6052	5538	71	22	3	4	− 1	207	60865	〃
〃	3851	2524	〃	10 09	53	6302	5766	66	20	3	6	− 3	433	61091	〃
〃	3852	2526	〃	10 30	1 14	5505	5037	41	13	9	8	2	− 304	60354	〃
〃	3853	2528	〃	10 49	1 33	5052	4623	73	23	9	11	4	− 713	59945	〃
〃	3854	2530	〃	11 08	1 52	4709	4309	42	13	9	13	6	−1041	59617	〃
〃	3855	2532	〃	11 34	2 18	3820	3495	49	15	13	16	11	−1857	58801	〃
〃	3856	2535	〃	12 05	2 49	3494	3197	20	6	13	19	13	−2169	58489	〃
43	3857	2537	〃	12 24	3 08	3146	2879	56	17	13	22	15	−2481	58177	〃
39	3858	1837	〃	14 53	5 37	5852	5355	69	21	16	39	0	0	60658	〃

Route 37_6 B.M. 1837—M.B.1847—B.M. 1850—B.M. 1837.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	9.33 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
39	3840	1837	V 14	15 30	0 00	5700	5216	68	21	8	0	0	60658	73
〃	3841	1839	〃	15 56	26	6530	5975	72	22	8	4	756	61414	〃
〃	3842	1841	〃	16 08	38	6757	6183	54	17	8	6	957	61615	〃
〃	3843	1843	〃	16 21	51	6745	6172	46	14	8	8	941	61599	〃
〃	3844	1845	〃	16 32	1 02	5949	5443	47	15	1	9	205	60863	〃
〃	3845	1847	〃	16 43	1 13	5007	4581	50	15	1	11	− 659	59999	〃
〃	3846	1850*	〃	17 34	2 04	3136	2869	60	19	− 4	20	−2381	58277	〃
〃	3847	1837	〃	18 30	3 00	5749	5260	69	21	− 8	28	0	60658	〃

* Removed after this gravity measurement.

Route 37_7 B.M.J. 3303—B.M. 4305—B.M.J.3303.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.01 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
41	3900	J. 3303	V 17	14 39	0 00	3836	3510	72	22	13	0	0	58555	74
〃	3901	4266	〃	14 59	20	3737	3419	61	19	13	2	− 96	58459	〃
〃	3902	4268	〃	15 12	33	3572	3268	53	16	13	4	− 252	58303	〃
〃	3903	4271	〃	15 30	51	3582	3278	65	20	13	6	− 240	58315	〃
〃	3904	4273	〃	15 44	1 05	4240	3880	69	21	13	8	361	58916	〃
〃	3905	4275	〃	15 57	1 18	5033	4605	62	19	13	9	1083	59638	〃
〃	3906	4277	〃	16 11	1 32	6042	5528	60	19	13	11	2004	60559	〃
〃	3907	4279	〃	16 24	1 45	6469	5919	42	13	13	13	2387	60942	〃
〃	3908	4282	〃	16 45	2 06	5810	5316	68	21	10	15	1787	60342	〃
〃	3909	4284	〃	17 04	2 25	4481	4100	78	24	10	17	572	59127	〃

Table IV. (Continued)

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.04 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
41	3910	4285	V 17	18 32	3 53	3554	3252	57	18	3	27	− 299	58256	74
〃	3911	〃	V 18	9 43		3652	3342	59	18	− 3				〃
〃	3912	4287	〃	9 59	4 09	2121	1941	104	32	− 3	29	−1688	56867	〃
〃	3913.1	4289	〃	10 14	4 24	0437	0400	69	21	− 3	31	−3242	55313	〃
〃	3913.2	〃	〃	10 16		7082	6480	〃	〃	− 3				〃
〃	3914	4291	〃	10 36	4 44	7020	6423	51	16	1	33	−3302	55253	〃
〃	3915	4293	〃	10 53	5 01	6668	6101	71	22	1	35	−3620	54935	〃
〃	3916	4295	〃	11 09	5 17	6585	6025	69	21	1	37	−3699	54856	〃
〃	3917	4298	〃	11 25	5 33	6835	6254	61	19	1	39	−3474	55081	〃
〃	3918.1	4300	〃	11 56	6 04	7494	6857	56	17	4	43	−2874	55681	〃
〃	3918.2	〃	〃	12 00		4528	4143	〃	〃	4				〃
〃	3919	4302	〃	12 13	6 17	5423	4962	73	23	4	44	−2050	56505	〃
〃	3920.1	4304	〃	12 26	6 30	6362	5821	70	22	4	46	−1194	57361	〃
〃	3920.2	〃	〃	12 30		0916	0838	〃	〃	8				〃
〃	3921	4305	〃	12 40	6 40	0916	0838	50	15	8	47	−1202	57353	〃
〃	3922	J. 3303	〃	15 39	9 39	2240	2050	72	22	−12	68	0	58355	〃

Route 37_8 B.M.J. 3303—B.M. 5—B.M.J. 3303.

Pref.	No.	B.M.	Date 1953	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.29 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
41	3888	J. 3303	V 16	16 26	0 00	3700	3386	71	22	− 13	0	0	58555	73
〃	3889	5381	〃	16 42	16	3630	3321	53	16	9	2	− 77	58478	〃
〃	3890	5383	〃	16 57	31	3957	3621	56	17	9	3	223	58778	〃
〃	3891	5385	〃	17 12	46	3661	3350	61	20	9	4	− 46	58509	〃
〃	3892	5388	〃	17 29	1 03	3598	3292	59	18	9	6	− 108	58147	〃

〃	3893		5392	〃	17 56	1 30	3535	3235	49	15	4	8	− 175	58380	〃
〃	3894		〃	V 17	9 21		3641	3332	〃	〃	− 5				〃
〃	3895	Nagasaki	M.O.*	〃	11 05	3 14	5234	4789	71	22	4	17	1289	59844	〃
〃	3896		5395	〃	11 35	3 44	5662	5181	47	15	9	20	1676	60231	〃
〃	3897		5398	〃	11 58	4 07	6253	5721	79	24	9	22	2223	60778	74
〃	3898		5**	〃	12 17	4 26	5851	5354	41	13	9	23	1844	60399	〃
〃	3899		5392	〃	13 55	6 04	3664	3353	49	15	12	32	− 161	58394	〃
〃	3900		J. 3303	〃	14 39	6 48	3836	3510	72	22	13	36	0	58555	〃

* Marine Observatory Bench Mark.
** Tide Gauge Station Bench Mark.

Table V. Results along the Routes 38_1, 38_2, 38_3. (0.01mgal.).

Route 38_1 B.M.J. 1935—B.M. 5369—B.M. 1976—B.M.J. 1935.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	8.15 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
43	4866.2	J. 1935	II 18	15 38	0 00	3245	2969	64	20	− 2	0	0	55193	87
〃	4867	5371	〃	16 02	24	3627	3319	72	22	− 2	3	349	55542	〃
〃	4868	5369	〃	16 23	45	4801	4393	69	21	− 2	7	1418	56611	〃
〃	4869	1937	〃	17 14	1 36	3187	2916	51	16	− 5	13	− 73	55120	〃
〃	4870	1939	〃	17 28	1 50	4472	4092	59	18	− 5	15	1103	56296	〃
〃	4871	1941	〃	17 49	2 11	4890	4474	52	16	− 8	18	1477	56670	〃
〃	4872	〃	II 19	9 22		5064	4634	〃	〃	− 5				〃
〃	4873	1943	〃	9 39	2 28	5413	4953	21	6	− 1	20	1788	56981	〃
〃	4874	1945	〃	10 15	3 04	6593	6033	63	19	− 1	25	2876	58069	〃
〃	4875	1947	〃	10 30	3 19	6540	5984	52	16	3	27	2826	58019	〃
〃	4876	1949	〃	10 44	3 33	5620	5142	33	10	3	29	1976	57169	〃
〃	4877.1	1950	〃	11 07	3 56	6718	6147	68	21	3	32	2989	58182	〃
〃	4877.2	〃	〃	11 12		1619	1481	〃	〃	3				〃
〃	4878	1953	〃	11 31	4 15	3301	3020	57	18	7	35	4526	59719	〃
〃	4879	1956	〃	11 58	4 42	3852	3525	45	14	7	38	5024	60217	〃

Table V. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	8.15 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
43	4880	1958	II 19	12 07	4 51	3398	3109	56	17	7	40	4609	59802	87
〃	4881	1960	〃	12 20	5 04	5746	5258	36	11	7	42	6750	61943	〃
〃	4882.1	1962	〃	12 33	5 17	7178	6568	61	19	7	43	8067	63260	〃
〃	4882.2	〃	〃	12 36		1315	1203	〃	〃	7				〃
〃	4883	1964	〃	12 58	5 39	1187	1086	59	18	7	46	7946	63139	〃
〃	4884	1966	〃	13 16	5 57	1080	0988	47	15	7	49	7842	63035	〃
〃	4885	1968	〃	15 34	8 15	1466	1341	46	14	− 1	68	8167	63360	〃
〃	4886	1970	〃	15 48	8 29	2117	1937	52	16	− 1	69	8764	63957	〃
〃	4887	1972	〃	16 01	8 42	2515	2301	44	14	− 1	71	9124	64317	〃
〃	4888	1974	〃	16 40	9 21	3264	2987	55	17	− 4	77	9804	64997	〃
39	4889.1	1976	〃	16 58	9 39	3708	3393	70	22	− 4	79	10203	65396	〃
〃	4889.2	〃	〃	17 03		7810	7146	〃	〃	− 4				〃
43	4890.1	1953	〃	18 56	11 32	1619	1481	58	18	− 8	94	4515	59708	〃
〃	4890.2	〃	〃	18 59		7860	7192	〃	〃	− 8				〃
〃	4891	1941	〃	19 45	12 18	4553	4166	52	16	− 7	100	1482	56675	〃
〃	4892	〃	II 20	8 50		4688	4290	51	16	− 7				〃
〃	4893	J. 1935	〃	9 32	13 00	3065	2804	70	22	− 3	106	0	55193	〃

Route 38_2 B.M.J. 1935—B.M. 2537—B.M. 1896—B.M.J.1935.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.12 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
43	4893	J. 1935	II 20	9 32	0 00	3065	2804	70	22	− 3	0	0	55193	87
〃	4894	1933	〃	10 12	40	3924	3590	72	22	− 3	4	782	55975	〃
〃	4895	2579	〃	10 36	1 04	3980	3642	55	17	1	6	831	56024	〃
〃	4896	2577	〃	10 49	1 17	3714	3398	58	18	1	7	587	55780	〃
〃	4897.1	2574	〃	11 18	1 46	0909	0832	71	22	1	9	−1977	53216	〃

〃	4897.$_2$	〃	〃	11 20		7693	7039	〃	〃	1				〃
〃	4898	2572	〃	11 34	2 00	5935	5431	38	12	5	10	−3592	51601	〃
〃	4899	2570	〃	11 50	2 16	5018	4591	48	15	5	12	−4431	50762	〃
〃	4900.$_1$	2565	〃	12 42	3 08	1555	1423	44	14	8	16	−7601	47592	〃
〃	4900.$_2$	〃	〃	12 47		4071	3725	〃	〃	8				〃
〃	4901		〃	15 36	5 57	3206	2933	63	19	4	31	− 8407	46786	〃
〃	4902	2558	〃	15 50	6 11	5705	5220	51	16	4	32	− 6124	49069	〃
〃	4903.$_1$	2556	〃	16 28	6 49	7647	6997	—	—	4	35	− 4366	50827	〃
〃	4903.$_2$		〃	16 31		2612	2390	—	—	0				〃
〃	4904	2553	〃	16 38	6 56	3293	3013	47	15	0	35	− 3728	51465	〃
〃	4905	2551	〃	16 50	7 08	3782	3461	62	19	0	36	− 3277	51916	〃
〃	4906.$_1$	2549	〃	17 15	7 33	2390	2187	47	15	0	39	− 4558	50635	〃
〃	4906.$_2$	〃	〃	17 17		0394	0361	〃	〃	0				〃
〃	4907.$_1$	2545	〃	18 40	8 56	3794	3472	51	16	− 7	46	− 1460	53733	〃
〃	4907.$_2$	〃	〃	18 43		0756	0692	〃	〃	− 7				〃
〃	4908	2543	〃	19 07	9 20	4033	3690	29	9	− 7	48	1529	56722	〃
〃	4909	2541	〃	19 37	9 50	5066	4635	105	32	− 7	50	2495	57688	〃
〃	4910	〃	II 21	9 17		5155	4717	〃	〃	− 6				〃
〃	4911	2539	〃	9 45	10 18	5310	4859	56	17	− 3	53	2622	57815	88
〃	4912	2537	〃	10 06	10 39	5710	5225	48	15	− 3	55	2984	58177	〃
〃	4913.$_1$		〃	11 11	11 44	1494	1367	—	—	2	60	− 889	54304	〃
〃	4913.$_2$		〃	11 13		7815	7151	—	—	2				〃
42	4914.$_1$		〃	12 49	13 20	0054	0049	—	—	9	68	− 7992	47201	〃
〃	4914.$_2$		〃	12 52		7821	7156	—	—	9				〃
〃	4915	1896	〃	14 31	14 59	3953	3617	61	19	8	77	−11522	43671	〃
〃	4916	1898	〃	15 20	15 48	4764	4359	61	19	8	81	−10784	44409	〃
〃	4917	1905	〃	16 06	16 34	3582	3278	64	20	5	85	−11871	43322	〃
43	4918	1907	〃	16 33	17 01	5244	4798	60	19	4	87	−10355	44838	〃
〃	4919.$_1$	1908	〃	16 42	17 20	6209	5681	40	12	4	89	− 9481	45712	〃
〃	4919.$_2$	〃	〃	16 44		0122	0112	〃	〃	4				〃
〃	4920	1910	〃	16 58	17 34	3417	3127	36	11	4	90	− 6468	48725	〃
〃	4921	1912	〃	17 12	17 48	5738	5250	47	15	4	91	− 4342	50851	〃
〃	4922.$_1$	1914	〃	17 30	18 06	7491	6854	52	16	0	93	− 2743	52450	〃
〃	4922.$_2$	〃	〃	17 34		7000	6405	〃	〃	0				〃
〃	4923	1916	〃	17 45	18 17	7314	6692	46	14	0	94	− 2459	52734	〃

Table V. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	$0.9150 \times SD$	h (cm)	$0.3086 \times h$	$E.T.$	$5.12 \times \sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
43	4924	1918	II 21	18 04	18 36	3956	3620	71	22	0	95	− 5524	49669	83
〃	4925	1921	〃	18 26	18 58	0190	0174	46	14	0	97	− 8980	46213	〃
〃	4926	1923	〃	18 43	19 15	4466	4086	50	15	− 3	99	− 5072	50121	〃
〃	4927.1		〃	19 20	19 52	7599	6953	—	—	− 3	102	− 2223	52970	〃
〃	4927.2		〃	19 22		0120	0110	—	—	− 3				〃
〃	4928	1926	〃	19 30	20 00	1064	0974	50	15	− 5	102	− 1346	53847	〃
〃	4929	1928	〃	19 45	20 15	3037	2779	33	10	− 5	104	452	55645	〃
〃	4930	J. 1931	〃	20 00	20 30	4630	4236	44	14	− 5	105	1912	57105	〃
〃	4931	J. 1935	〃	20 24	20 54	2535	2320	64	20	− 5	107	0	55193	〃

Route 38_3 B.M.J. 1935—B.M. 5378—B.M. 2594—B.M.J.1935.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	$0.9150 \times SD$	h (cm)	$0.3086 \times h$	$E.T.$	$3.27 \times \sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
43	4932	J. 1935	II 22	9 10	0 00	2545	2420	64	20	− 7	0	0	55193	88
〃	4933	J. 2633	〃	9 47	37	6547	5991	71	22	− 5	2	3573	58766	〃
〃	4934.1		〃	10 10	1 00	7632	6983	—	—	− 5	3	4542	59735	〃
〃	4934.2		〃	10 11		2741	2508	—	—	− 5				〃
〃	4935	5374	〃	10 15	1 04	3048	2789	66	20	− 5	4	4842	60035	〃
〃	4936	5376	〃	10 27	1 16	3862	3534	58	18	− 5	4	5585	60778	〃
〃	4937	5378	〃	10 40	1 29	3608	3301	35	11	− 1	5	5348	60541	〃
〃	4938	2632	〃	11 28	2 17	3085	2823	62	19	− 1	8	4875	60068	〃
〃	4939	2631	〃	11 39	2 28	2532	2317	58	18	3	8	4372	59565	〃
〃	4940	2627	〃	14 33	5 22	3046	2787	50	15	9	18	4835	60028	〃
〃	4941.1	2624	〃	14 59	5 48	1611	1474	66	20	9	19	3526	58719	〃
〃	4941.2	〃	〃	15 03		4178	3823	〃	〃	9				〃
〃	4942	2620	〃	15 48	6 33	2558	2341	79	24	8	22	2044	57237	〃
〃	4943.1	2619	〃	16 00	6 45	2555	2338	62	19	8	22	2036	57229	〃
〃	4943.2	〃	〃	16 03		4286	3922	〃	〃	8				〃

〃	4944.$_1$		2607	〃	19 27	7 09	0344	0315	52	16	− 2	24	−1586	53607	〃
〃	4944.$_2$		〃	〃	19 30		7855	7187	〃	〃	− 4				〃
〃	4945		2605	〃	19 45	7 24	6728	6156	59	18	− 4	24	−2615	52578	〃
〃	4946		2604	〃	19 58	7 37	6297	5762	60	19	− 4	25	−3009	52184	〃
〃	4947		2600	〃	20 24	8 03	2666	2439	48	15	− 4	26	−6337	48856	〃
〃	4948		2598	〃	20 39	8 18	3260	2983	49	15	− 4	27	−5794	49399	〃
〃	4949		2596	〃	20 54	8 33	4050	3706	46	14	− 4	28	−5073	50120	〃
44	4950.$_1$		2594	〃	21 12	8 51	4174	3819	51	16	− 4	29	−4959	50234	〃
〃	4950.$_2$		〃	〃	21 18		0130	0119	〃	〃	− 4				〃
〃	4951		2609	〃	22 37	10 10	4710	4310	59	18	− 1	33	− 767	54426	〃
〃	4952		2610	〃	23 06	10 39	5216	4773	71	22	− 1	35	− 302	54891	〃
〃	4953		〃	II 23	9 52		5355	4900	〃	〃	− 6				〃
〃	4954		2613	〃	10 16	11 03	5742	5254	87	27	− 6	36	56	55249	〃
〃	4955		2615	〃	10 37	11 24	4624	4231	48	15	− 3	37	− 977	54216	〃
43	4956	Ôita	W. S.*	〃	13 04	13 51	5803	5310	52	16	4	45	102	55295	〃
〃	4957.$_1$		J. 1935	〃	13 53	14 40	5687	5204	66	20	7	48	0	55193	〃

*Weather Station Bench Mark.

Table VI. Results along the Routes 39_1, 39_2, 39_3, 39_4, 39_5. (0.01mgal.).
Route 39_1 B.M.J. 2635—B.M. 2594—B.M.J. 2635.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	4.55 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
44	4797	J. 2635	II 13	13 15	0 00	4260	3898	61	19	− 5	0	0	51026	86
〃	4798	2582	〃	13 41	26	3704	3389	46	14	− 6	2	− 517	50509	〃
〃	4799	2584	〃	13 58	43	4448	4070	46	14	− 6	3	163	51189	〃
〃	4800	2586	〃	14 20	1 05	3963	3626	53	16	− 6	5	− 281	50745	〃
〃	4801	2588	〃	14 35	1 20	4226	3867	64	20	− 7	6	− 38	50988	〃

Table VI. (Continued)

Prof.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	4.55 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
44	4802	2590	II 13	14 50	1 35	3811	3487	43	13	− 7	7	− 426	50600	86
〃	4803	2592	〃	15 02	1 47	4304	3938	59	18	− 7	8	29	51055	〃
〃	4804	2594	〃	15 19	2 04	3410	3120	54	17	− 7	10	− 792	50234	〃
〃	4805.$_1$	J. 2635	〃	16 30	3 15	4275	3912	63	19	− 4	15	0	51026	〃

Route 39$_2$ B.M.J. 2635—B.M. 2674—B.M.J. 2635.

Prof.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	6.31 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
44	4779	J. 2635	II 12	9 17	0 00	2859	2616	62	19	− 4	0	0	51026	85
〃	4780	2637	〃	9 37	20	2647	2422	49	15	− 4	2	− 200	50826	〃
〃	4781	2639	〃	9 52	35	2329	2131	59	18	− 4	4	− 490	50536	〃
〃	4782	2641	〃	10 10	53	2141	1959	84	26	− 4	6	− 656	50370	〃
〃	4783.$_1$	2642	〃	10 23	1 06	1056	0966	61	19	− 4	7	−1657	49369	〃
〃	4783.$_2$	〃	〃	10 25		7748	7089	〃	〃	− 4				〃
〃	4784	2644	〃	10 55	1 36	7297	6677	19	6	− 5	10	−2086	48940	〃
〃	4785	2646	〃	11 42	2 23	7943	7268	76	23	− 6	15	−1484	49542	〃
〃	4786	2648	〃	11 59	2 40	7855	7187	42	13	− 6	17	−1577	49449	〃
〃	4787	2655	〃	13 38	4 19	6443	5895	64	20	− 6	27	−2872	48154	86
〃	4788	2660	〃	14 23	5 04	4863	4450	20	6	− 6	32	−4336	46690	〃
〃	4789	2663	〃	14 56	5 37	6409	5864	55	17	− 5	35	−2913	48113	〃
〃	4790	2665	〃	15 38	6 19	5651	5171	59	18	− 3	40	−3608	47418	〃
〃	4791	2668	〃	16 05	6 46	3000	2745	50	15	− 3	43	−6040	44986	〃
〃	4792.$_1$	2674	〃	17 03	7 44	1972	1804	58	18	1	49	−6980	44046	〃
〃	4792.$_2$	〃	〃	17 07		3713	3397	〃	〃	1				〃
〃	4793.$_1$		〃	17 35	8 12	0018	0016	—	—	5	52	−10378	40648	〃
〃	4793.$_2$		〃	17 38		0264	0242	—	—	5				〃
〃	4794	2671	〃	17 41	8 15	0075	0069	49	15	5	52	−10536	40490	〃
〃	4795.$_1$	2665	〃	18 29	9 03	7655	7004	57	18	5	57	− 3603	47423	〃

〃	4795.$_2$	〃	〃	18 33		0107	0098	〃	〃	10				〃
〃	4796	〃	II 13	9 18		0295	0270	54	17	− 3				〃
〃	4797	J. 2635	〃	13 15	13 00	4260	3898	61	19	− 5	82	0	51026	〃

Route 39$_3$ B.M.J. 2736—B.M. 4—B.M.J. 2635—B.M.J. 2736.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.00 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
44	4762	J. 2736	II 11	12 16	0 00	2609	2387	72	22	− 6	0	0	45290	85
〃	4763	2734	〃	13 06	50	2446	2238	64	20	− 5	4	− 154	45136	〃
〃	4764	2732	〃	13 18	1 02	3809	3485	42	13	− 5	5	1085	46375	〃
〃	4765	2730	〃	13 33	1 17	4214	3856	49	15	− 4	7	1457	46747	〃
〃	4766	2728	〃	13 47	1 31	5510	5042	74	23	− 4	8	2650	47940	〃
〃	4767	2726	〃	14 37	2 21	6217	5689	67	21	− 1	12	3294	48584	〃
〃	4768	2724	〃	14 50	2 34	6228	5699	62	19	− 1	13	3301	48591	〃
〃	4769	2722	〃	15 12	2 56	6605	6044	56	17	− 1	15	3642	48932	〃
〃	4770.$_1$	2720	〃	15 29	3 13	7576	6932	43	13	− 1	16	4525	49815	〃
〃	4770.$_2$	〃	〃	15 32		1430	1308	〃	〃	2				〃
〃	4771	2718	〃	15 44	3 25	2062	1887	27	8	2	17	5098	50388	〃
〃	4772	4.$_1$*	〃	16 00	3 41	2151	1968	73	23	2	19	5192	50482	〃
〃	4773	4 *	〃	16 20	4 01	2219	2030	80	25	2	20	5255	50545	〃
〃	4774	2716	〃	16 59	4 40	2405	2201	70	22	6	24	5423	50713	〃
〃	4775	2714	〃	17 13	4 54	2451	2243	75	23	6	25	5465	50755	〃
〃	4776	2712	〃	17 28	5 09	2624	2401	80	25	6	26	5624	50914	〃
〃	4777	2709	〃	17 55	5 36	2684	2456	116	36	9	28	5691	50981	〃
〃	4778	J. 2635	〃	18 10	5 51	2754	2520	63	19	9	30	5736	51026	〃
〃	4805.$_2$	〃	II 13	16 33		7783	7121	〃	〃	− 4				86
〃	4806.$_1$	J. 2736	〃	18 43	8 01	1513	1384	69	21	5	40	0	45290	〃

* Tide Gauge Station Bench Marks.

Route 39_4 B.M.J. $2751._1$—B.M.J. 2736—B.M. 2830—B.M.J. $2751._1$.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	$6.01 \times \Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
44	4754	J. $2751._1$	II 11	9 35	0 00	7045	6446	54	17	− 6	0	0	43729	85
〃	4755	2748	〃	10 02	27	6682	6114	64	20	− 6	3	− 332	43397	〃
〃	4756	2746	〃	10 18	43	5956	5450	66	20	− 6	4	− 997	42732	〃
〃	4757	2744	〃	10 31	56	5537	5066	61	19	− 5	5	−1382	42347	〃
〃	4758	2742	〃	10 45	1 10	6370	5829	62	19	− 5	7	− 621	43108	〃
〃	4759	2740	〃	11 23	1 48	6897	6311	59	18	− 5	11	− 144	43585	〃
〃	4760	2738	〃	11 35	2 00	7195	6583	62	19	− 6	12	127	43856	〃
〃	$4761._1$	2737	〃	12 06	2 31	7655	7004	68	21	− 6	15	547	44276	〃
〃	$4761._2$	〃	〃	12 07		1500	1373	〃	〃	− 6				〃
〃	4762	J. 2736	〃	12 16	2 40	2609	2387	72	22	− 6	16	1561	45290	〃
〃	$4806._2$	〃	II 13	18 48		3684	3371	69	21	5				86
〃	4807	2803	〃	19 57	3 49	5154	4716	50	15	10	23	2898	46627	〃
〃	4808	〃	II 14	8 57		5252	4806	〃	〃	− 2				〃
〃	4809	2801	〃	9 55	4 47	2421	2215	53	16	− 1	29	303	44032	〃
〃	4810	2804	〃	10 26	5 18	6128	5607	41	13	− 1	32	3689	47418	〃
〃	4811	2816	〃	12 37	7 29	2807	2568	51	16	− 4	45	637	44366	〃
〃	$4812._1$	2824	〃	13 44	8 36	1401	1282	58	18	− 6	52	− 656	43073	〃
〃	$4812._2$	〃	〃	13 49		7221	6607	〃	〃	− 6				〃
〃	4813	2828	〃	15 39	10 26	5900	5399	48	15	− 6	63	−1878	41851	〃
〃	4814	2830	〃	16 05	10 52	2812	2573	50	15	− 6	66	−4707	39022	〃
〃	$4815._1$		〃	17 25	12 12	7708	7053	—	—	− 4	73	− 247	43482	〃
〃	$4815._2$		〃	17 28		0538	0492	—	—	− 4				〃
〃	4816	2803	〃	19 34	14 18	3975	3637	50	15	6	86	2910	46639	〃
〃	4817	J. $2751._1$	〃	20 35	15 19	0794	0727	53	16	11	92	0	43729	〃

Route 39_5 B.M.J. 2751.$_1$—B.M. 2488—B.M.J. 2751.$_1$.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	4.07 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
44	4818.$_2$	J. 2751.$_1$	II 15	10 10	0 00	6276	5743	53	16	1	0	0	43729	86
〃	4819	9182	〃	10 26	16	6228	5699	− 2	− 1	1	1	− 62	43667	〃
〃	4820	9179	〃	11 08	58	5769	5279	2	1	2	4	− 482	43247	〃
〃	4821	9176	〃	11 33	1 23	3553	3251	44	14	1	6	−2500	41229	〃
〃	4822.$_1$	9174	〃	12 11	2 01	1279	1170	61	19	1	8	−4578	39151	〃
〃	4822.$_2$	〃	〃	12 14		2395	2191	〃	〃	1				〃
〃	4823	9171	〃	12 47	2 34	1289	1179	61	19	− 1	11	−5595	38131	〃
〃	4824	9169	〃	13 49	3 36	1965	1798	45	14	− 4	15	−4988	38741	〃
〃	4825	9167	〃	14 08	3 55	3585	3280	44	14	− 4	16	−3507	40222	〃
〃	4826	9164	〃	14 44	4 31	6391	5848	51	16	− 7	18	− 942	42787	〃
〃	4827	9162	〃	14 59	4 46	5892	5391	36	11	− 7	20	−1406	42323	〃
〃	4828.$_1$	9159	〃	15 32	5 19	7323	6701	78	24	− 8	22	− 86	43643	〃
〃	4828.$_2$	〃	〃	15 38		5796	5303	〃	〃	− 8				〃
〃	4829	9157	〃	15 49	5 30	6003	5493	36	11	− 8	22	91	43820	〃
〃	4830	9154	〃	16 06	5 47	6694	6125	61	19	− 8	24	729	44458	〃
〃	4831	〃	II 16	10 39		6780	6204	64	20	3				〃
〃	4832	Aburatsu W. S. *	〃	11 27	6 35	6437	5890	55	17	3	27	409	44138	〃
〃	4833	9151	〃	12 02	7 10	6963	6371	47	15	3	29	886	44615	〃
〃	4834	9149	〃	12 19	7 27	6990	6396	25	8	3	31	902	44631	〃
〃	4835	9147	〃	12 31	7 39	6649	6084	36	11	2	31	592	44321	〃
〃	4836	9145	〃	12 44	7 52	5912	5409	33	10	2	32	− 85	43644	〃
〃	4837.$_1$	9143	〃	13 01	8 09	7232	6617	0	0	2	33	1112	44841	〃
〃	4837.$_2$	〃	〃	13 05		4435	4058	〃	〃	2				〃
〃	4838	9141	〃	13 18	8 22	4515	4131	54	17	2	34	1201	44930	〃
〃	4839	9139	〃	13 38	8 42	4950	4529	53	16	− 1	35	1594	45323	〃
〃	4840	9137	〃	14 36	9 40	5378	4921	37	11	− 4	39	1974	45703	〃
〃	4841	9135	〃	14 50	9 54	5858	5360	48	15	− 4	40	2416	46145	〃
45	4842	9133	〃	15 10	10 14	6063	5548	60	19	− 4	42	2606	46335	〃
〃	4843	9131	〃	15 24	10 28	5121	4686	64	20	− 4	43	1744	45473	〃
〃	4844	9130	〃	15 38	10 42	6276	5743	65	20	− 7	44	2797	46526	〃

* Weather Station, concrete floor of the entrance porch.

Table VI. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	4.07 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
45	5016	9130	III 29	10 09		4090	3742	68	21	− 1				89
〃	5017	9128	〃	10 28	11 01	4057	3712	19	6	− 1	45	2751	46480	〃
〃	5018	9126	〃	10 46	11 19	3308	3027	65	20	− 2	46	2078	45807	〃
〃	5019	9124	〃	11 02	11 35	3467	3172	24	7	− 2	47	2209	45938	〃
〃	5020	9122	〃	11 26	11 59	4108	3759	41	13	− 2	49	2800	46529	〃
〃	5021	9120	〃	11 42	12 15	3250	2974	13	4	− 3	50	2004	45733	〃
〃	5022	2518	〃	11 54	12 27	3531	3231	33	10	− 3	51	2266	45995	〃
〃	5023	2516	〃	12 10	12 43	5121	4686	35	11	− 3	52	3721	47450	〃
〃	5024	2514	〃	13 11	13 44	4520	4136	65	20	− 3	56	3176	46905	〃
〃	5025	2512	〃	13 25	13 58	2810	2571	51	16	− 3	57	1606	45335	〃
〃	5026	2510	〃	13 41	14 14	5411	4951	42	13	− 2	58	3983	47712	〃
〃	5027	2508	〃	13 54	14 27	5302	4851	70	22	− 2	59	3891	47620	〃
〃	5028	2506	〃	14 12	14 45	4010	3669	66	20	− 2	60	2706	46435	〃
〃	5029	2504	〃	14 28	15 01	4926	4507	56	17	− 2	61	3540	47269	〃
〃	5030	2502	〃	14 43	15 16	5351	4896	85	26	− 3	62	3936	47665	〃
〃	5031	2500	〃	15 06	15 39	4912	4494	38	12	− 3	64	3518	47247	〃
〃	5032	2497	〃	15 36	16 09	5655	5174	0	0	− 2	66	4185	47914	〃
〃	5033	2494	〃	15 57	16 30	6108	5589	40	12	− 2	67	4611	48340	〃
〃	5034	2491	〃	16 32	17 05	6245	5714	44	14	1	70	4738	48467	〃
〃	5035	2489	〃	16 47	17 20	6575	6016	66	20	1	70	5046	48775	〃
〃	5036	2488	〃	16 58	17 31	5700	5216	20	6	1	71	4231	47960	〃
〃	5008.$_2$	〃	III 28	14 46		7624	6976	〃	〃	− 1				〃
〃	5009	2795	〃	15 03	17 48	3543	3242	34	10	0	72	501	44230	〃
〃	5010	2793	〃	15 28	18 13	0753	0689	76	23	0	74	−2041	41688	〃
〃	5011	2790	〃	16 12	18 57	2132	1951	63	19	2	77	− 784	42945	〃
〃	5012	2788	〃	16 34	19 19	2055	1880	72	22	5	79	− 851	42878	〃
〃	5013	2786	〃	16 51	19 36	2766	2531	27	8	5	80	− 215	43514	〃
〃	5014.$_1$	2784	〃	17 06	19 51	3153	2885	78	24	5	81	154	43883	〃
〃	4845	〃	II 16	17 12		3355	3070	74	23	− 9				86
44	4846	2782	〃	17 31	20 10	4044	3700	71	22	− 8	82	783	44512	〃

〃	4847	2781		〃	18 16	20 55	3860	3532	38	12	− 8	85	602	44331	〃
〃	4848	〃	II	17	10 00		3919	3586	40	12	0				〃
〃	4849	Miyakonojô W.S. *		〃	10 25	21 20	3570	3267	61	19	0	87	288	44017	〃
〃	4850	2779		〃	11 06	22 01	4012	3671	63	19	3	90	692	44421	〃
〃	4851	2778		〃	11 15	22 10	4102	3753	46	14	3	90	769	44498	87
〃	4852	2775		〃	11 45	22 40	4701	4301	48	15	5	92	1318	45047	〃
〃	4853	2773		〃	14 05	25 00	5188	4747	31	10	2	102	1746	45475	〃
〃	4854	2771		〃	14 16	25 11	4362	3991	42	13	2	103	992	44721	〃
〃	4855	2769		〃	14 28	25 23	4718	4317	72	22	2	103	1327	45056	〃
〃	4856	2767		〃	14 40	25 35	5664	5183	49	15	− 2	104	2181	45910	〃
〃	4857	2765		〃	14 55	25 50	6153	5630	54	17	− 2	105	2629	46358	〃
〃	4858.1	2762		〃	15 12	26 07	7426	6795	52	16	− 2	106	3792	47521	〃
〃	4858.2	〃		〃	15 15		3861	3533	〃	〃	− 2				〃
〃	4859	2760		〃	15 28	26 20	3923	3590	61	19	− 2	107	3851	47580	〃
〃	4860	2758		〃	15 42	26 34	3928	3594	117	36	− 6	108	3867	47595	〃
〃	4861	2756		〃	16 22	27 14	2780	2544	53	16	− 6	111	2794	46523	〃
〃	4862.1	2753		〃	16 54	27 46	1154	1056	59	18	− 8	113	1301	45033	〃
〃	4862.2	〃		〃	16 57		4788	4381	〃	〃	− 8				〃
〃	4863	Miyazaki W .S. **		〃	17 35	28 24	3525	3225	78	24	− 9	116	150	43879	〃
〃	4864	J. 2751.1		〃	18 11	29 00	3372	3085	52	16	− 9	118	0	43729	〃

* Weather Station, entrance.

** Weather Station Barometer Room.

Table VII. Results along the Routes 40_1, 40_2, 40_3, 40_4, 40_5, 40_6, 40_7,40_8. (0.01mgal.).

Route 40_1 B.M.1874—B.M.1847—B.M.1874.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	−0.93 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
42	5164	1874	V 23	12 15	0 00	3227	2953	76	23	4	0	0	56155	91
〃	5165	1870	〃	12 42	27	2080	1903	63	19	8	0	−1050	55105	〃
〃	5166	1868	〃	12 52	37	1779	1628	59	18	8	− 1	−1325	54830	〃
〃	5167	1866	〃	13 09	54	2296	2101	61	19	8	− 1	− 851	55304	〃
〃	5168	1864	〃	13 22	1 07	3791	3469	66	20	8	− 1	518	56673	〃

Table VII. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	−0.93 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
42	5169	1862	V 23	13 32	1 17	3932	3598	65	20	11	− 1	650	56805	91
〃	5170	1860	〃	13 44	1 29	4302	3936	62	19	11	− 1	987	57142	〃
〃	5171	1858	〃	13 58	1 43	5528	5058	63	19	11	− 2	2110	58265	〃
〃	5172	1856	〃	14 09	1 54	5903	5401	62	19	11	− 2	2453	58608	〃
〃	5173	1854	〃	14 20	2 05	6816	6237	55	17	11	− 2	3287	59442	〃
〃	5174	1852	〃	14 35	2 20	6279	5745	66	20	13	− 2	2800	58955	〃
39	5175	1850 *	〃	14 55	2 40	5518	5049	65	20	13	− 3	2105	58260	〃
〃	5176	1847	〃	15 15	3 00	7422	6791	54	17	13	− 3	3844	59999	〃
42	5177	1874	〃	17 37	5 22	3219	2945	76	23	7	− 5	0	56155	〃

* New Bench Mark (different from B.M. 1850 listed in Table IV.)

Route 40_2 B.M.1874—B.M.1896—B.M.1902—B.M.1896—B.M.1874.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.15 × $\sum\delta T$ Drift	Adjust-ment	$\sum\delta g$	g 979.	Field Note No.
				h m	h m										
42	5248	1874	V 27	14 57	0 00	5291	4841	76	23	− 2	0	0	0	56155	92
〃	5249	1876	〃	15 13	16	5462	4998	65	20	− 2	2	0	152	56307	〃
〃	5250	1878	〃	15 24	27	5498	5031	48	15	− 2	3	0	179	56334	〃
〃	5251	1880	〃	15 38	41	4976	4553	31	10	− 1	4	1	− 305	55850	〃
〃	5252	1883	〃	15 58	1 01	3192	2921	49	15	− 1	5	4	− 1936	54219	〃
〃	$5253._1$	1885	〃	16 15	1 18	2050	1876	50	15	− 1	7	6	− 2985	53170	〃
〃	$5253._2$	〃	〃	16 18		7726	7069	〃	〃	− 1					〃
〃	5254	1887	〃	17 02	2 02	5124	4688	18	6	1	10	11	− 5381	50774	〃
〃	$5255._1$	1889	〃	17 19	2 19	1600	1464	−20	− 6	1	12	17	− 8625	47530	〃
〃	$5255._2$	〃	〃	17 21		7723	7067	〃	〃	1					〃

〃	5256	1892	〃	17 40	2 38	5746	5258	39	12	0	13	21	−10422	45733	〃
〃	5257	1894	〃	17 56	2 54	4178	3823	40	12	0	15	24	−11862	44293	〃
〃	5258	1896	〃	18 09	3 07	3474	3179	58	18	0	16	25	−12502	43653	〃
〃	5259	1899	〃	18 35	3 33	4869	4455	40	12	2	19	23	−11231	44924	〃
〃	5260	1902	〃	19 25	4 23	0775	0709	44	14	2	23	30	−14986	41169	〃
〃	5261	1896	〃	20 09	5 07	3501	3203	57	18	4	26	25	−12484	43671	〃
〃	5273.2	〃	V 28	17 00		0032	0029	〃	〃	− 4					〃
〃	5274.1	1887	〃	17 45	5 52	7805	7142	12	4	− 3	30	11	− 5374	50781	93
〃	5274.2	〃	〃	17 48		0127	0116	〃	〃	− 3					〃
〃	5275	1874	〃	18 44	6 48	5967	5460	77	24	1	35	0	0	56155	〃

Route 40_3 B.M.1896—B.M.15—(No.5271)—B.M.1896.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	6.00 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
42	5262	1896	V 28	11 14	0 00	3658	3347	58	18	9	0	0	43671	92
〃	5263	1 *	〃	11 38	24	2512	2298	92	28	5	2	−1045	42626	〃
〃	5264.1	2 *	〃	11 58	44	1145	1048	86	27	5	4	−2298	41373	〃
〃	5264.2	〃	〃	12 00		7721	7065	〃	〃	5				〃
〃	5265	5 *	〃	12 24	1 08	4369	3998	88	27	5	7	−5368	38303	〃
〃	5266.1	7 *	〃	12 40	1 24	1438	1316	94	29	1	8	− 8053	35618	〃
〃	5266.2	〃	〃	12 43		7645	6995	〃	〃	1				〃
〃	5267	10 *	〃	13 10	1 51	3831	3505	88	27	1	11	−11548	32123	〃
〃	5268	13 *	〃	13 37	2 18	2510	2297	84	26	− 3	14	−12764	30907	〃
〃	5269.1	14 *	〃	14 15	2 56	1124	1028	85	26	− 3	17	−14036	29635	〃
〃	5269.2	〃	〃	14 18		4434	4057	〃	〃	− 3				〃
〃	5270	15 *	〃	14 41	3 19	2734	2502	86	27	− 5	20	−15595	28076	〃
〃	5271.1	**	〃	15 16	3 54	5060	4630	—	—	− 5	23	−13497	30174	〃
〃	5271.2	〃	〃	15 19		0133	0122	—	—	− 5				〃
〃	5272.1	***	〃	16 05	4 40	7528	6888	—	—	− 5	28	− 6736	36935	〃
〃	5272.2	〃	〃	16 07		0086	0079	—	—	− 5				〃
〃	5273.1	1896	〃	16 57	5 30	7433	6801	57	18	− 4	33	0	43671	〃

* Kyôto University Bench Marks.
** Inside the hut at the summit of Mt. Aso.
*** Close to the monument commemorating the Emperor's visit.

Route 40$_4$ B.M.1874—B.M.2674—B.M.1874.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	E.T.	8.40 × $\sum\delta T$ Drift	Adjustment	$\sum\delta g$	g 979.	Field Note No.
				h m	h m										
42	5225	1874	V 26	12 26	0 00	3596	3290	76	23	0	0	0	0	56155	92
〃	5226	Kumamoto Univ. *	〃	12 57	31	3718	3402	27	8	− 2	4	0	91	56246	〃
〃	5227	〃	〃	13 24		3714	3398	〃	〃	− 2					〃
〃	5228	2707	〃	13 55	1 02	3403	3114	60	19	− 2	8	1	− 187	55968	〃
〃	5229	2705	〃	14 21	1 28	3387	3099	67	21	− 2	13	1	− 205	55950	〃
〃	5230	2703	〃	14 43	1 50	4043	3699	67	21	− 1	15	− 1	396	56551	〃
〃	5231	2701	〃	15 01	2 08	3937	3602	53	16	− 1	18	− 1	291	56446	〃
〃	5232	2699	〃	15 50	2 57	3735	3418	63	19	1	25	0	104	56259	〃
〃	5233.$_1$	2697	〃	16 04	3 11	2655	2429	59	18	1	27	3	− 891	55264	〃
〃	5233.$_2$	〃	〃	16 07		7162	6553	〃	〃	1					〃
〃	5234	2695	〃	16 47	3 51	3679	3366	59	18	3	33	13	− 4092	52063	〃
〃	5235.$_1$	2693	〃	17 13	4 17	1146	1049	63	19	3	36	21	− 6419	49736	〃
〃	5235.$_2$	〃	〃	17 16		7704	7049	〃	〃	3					〃
〃	5236	2691	〃	17 45	4 46	4473	4093	64	20	5	40	30	− 9385	46770	〃
〃	5237	2689	〃	18 14	5 15	3491	3194	65	20	5	45	33	−10292	45863	〃
〃	5238	2687	〃	18 27	5 28	4284	3920	66	20	5	46	31	− 9565	46590	〃
〃	5239	2685	〃	18 44	5 45	3706	3391	62	19	6	49	33	−10099	46056	〃
〃	5240	2683	〃	18 57	5 58	4035	3692	66	20	6	50	32	− 9797	46358	〃
〃	5241	〃	V 27	8 17		4170	3816	63	19	8					〃
〃	5242.$_1$	2681	〃	8 44	6 25	2332	2134	44	14	8	54	37	−11493	44662	〃
〃	5242.$_2$	〃	〃	8 48		4241	3881	〃	〃	8					〃
〃	5243	2679	〃	9 28	7 05	2578	2359	55	17	8	60	42	−13023	43132	〃
〃	5244	2676	〃	10 06	7 43	2862	2619	55	17	6	65	41	−12769	43386	〃
44	5245	2674	〃	10 35	8 12	3582	3278	72	22	4	69	39	−12109	44046	〃
42	5246.$_1$	2683	〃	11 29	9 06	6109	5590	64	20	4	76	32	− 9799	46356	〃
〃	5246.$_2$	〃	〃	11 31		0095	0087	11	3	0					〃
〃	5247.$_1$		〃	12 52	10 27	5848	5351	—	—	− 2	88	15	− 4535	51620	〃
〃	5247.$_2$		〃	12 54		0357	0327	—	—	− 2					〃
〃	5248	1874	〃	14 57	12 30	5291	4841	76	23	− 2	105	0	0	56155	〃

* G.S.I. Gravity Base Station, Faculty of Science, Kumamoto University.

Route 40_5 B.M.1874—B.M.J.2865—B.M.1874.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	$0.9150 \times SD$	h (cm)	$0.3086 \times h$	$E.T.$	$6.90 \times \sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
42	5178	1874	V 24	9 10	0 00	3308	3027	76	23	− 3	0	0	56155	91
〃	5179	Kumamoto W.S. *	〃	9 28	18	2458	2249	70	22	− 3	2	− 781	55374	〃
〃	5180	2366	〃	9 53	43	3068	2807	56	17	− 3	5	− 231	55924	〃
〃	5181	2367	〃	10 03	53	3177	2907	41	14	− 3	6	− 135	56020	〃
〃	5182	2369	〃	10 21	1 11	3907	3575	53	16	− 3	8	533	56688	〃
〃	5183	2371	〃	10 33	1 23	4915	4497	65	20	− 2	10	1458	57613	〃
〃	5184	2373	〃	10 47	1 37	5157	4719	69	21	− 2	11	1680	57835	〃
〃	5185	2375	〃	11 00	1 50	4650	4255	34	10	− 2	12	1204	57359	〃
〃	5186	2377	〃	11 11	2 01	3835	3509	56	17	− 2	14	463	56618	〃
〃	5187	2379	〃	11 28	2 18	3724	3407	60	19	− 2	16	361	56516	〃
〃	5188	2381	〃	11 41	2 31	3467	3172	72	22	0	17	130	56285	〃
〃	5189	2383	〃	11 52	2 42	2863	2620	57	18	0	19	− 428	55727	〃
〃	5190	2385	〃	12 05	2 55	2965	2713	62	19	0	20	− 335	55820	〃
〃	5191	2387	〃	12 20	3 10	3197	2925	55	17	0	22	− 127	56028	〃
〃	5192	2389	〃	12 33	3 23	2252	2061	56	17	3	23	− 989	55166	〃
〃	$5193._1$	2391	〃	12 44	3 34	1974	1806	49	15	3	25	−1248	54907	〃
〃	$5193._2$	〃	〃	12 47		5508	5040	〃	〃	3				〃
〃	5194	2394	〃	14 23	5 10	5050	4621	58	18	6	36	−1672	54483	〃
〃	5195	2395	〃	14 31	5 18	4570	4182	53	16	9	37	−2111	54044	〃
〃	5196	2398	〃	14 54	5 41	5147	4710	83	26	9	39	−1575	54580	〃
〃	5197	2400	〃	15 07	5 54	4881	4466	54	17	9	41	−1830	54325	〃
〃	5198	J. 2865	〃	15 34	6 21	4076	3730	65	20	10	44	−2565	53590	〃
〃	$5224._2$	〃	V 26	10 04		0778	0712	63	19	1				92
〃	5225	1874	〃	12 26	8 43	3596	3290	76	23	0	60	0	56155	〃

* Weather Station Bench Mark.

Route 40_6 B.M.J.2865—B.M.2830—B.M.J.2865.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.50× $\sum\delta T$ Drift	Adjustment	$\sum\delta g$	g 979.	Field Note No.
				h m	h m										
42	5204	J. 2865	V 25	9 59	0 00	4202	3845	63	19	0	0	0	0	53590	91
〃	5205	2863	〃	10 25	26	2857	2614	72	22	0	3	3	− 1234	52356	〃
〃	5206	2861	〃	10 41	42	1124	1028	63	19	− 1	5	7	− 2830	50760	〃
〃	5207	2859	〃	10 56	57	2045	1871	52	16	− 1	8	5	− 1991	51599	〃
〃	$5208._1$	2856	〃	11 16	1 17	1107	1013	46	14	− 1	10	7	− 2855	50735	〃
〃	$5208._2$	〃	〃	11 19		7456	6822	〃	〃	− 1					〃
〃	5209	2854	〃	11 35	1 33	7112	6507	30	9	− 1	12	8	− 3178	50412	〃
〃	5210	2852	〃	11 51	1 49	6662	6096	77	24	− 1	14	9	− 3577	50013	〃
〃	5211	2850	〃	12 07	2 05	5324	4871	48	15	− 1	16	12	− 4816	48774	〃
〃	5212	2848	〃	13 16	3 14	4383	4010	64	20	− 1	24	14	− 5682	47908	〃
〃	5213	2847	〃	13 26	3 24	3907	3575	55	17	− 1	26	15	− 6123	47467	〃
〃	5214	2845	〃	13 39	3 37	3747	3429	47	15	1	27	16	− 6271	47319	92
〃	5215	2843	〃	13 51	3 49	2797	2559	55	17	1	29	18	− 7143	46447	〃
〃	5216	2841	〃	14 03	4 01	3435	3143	72	22	1	30	16	− 6553	47037	〃
〃	5217	2839	〃	14 16	4 14	2635	2411	51	16	1	32	18	− 7295	46295	〃
〃	5218	2836	〃	14 43	4 41	2370	2169	65	20	4	35	19	− 7534	46056	〃
〃	$5219._1$	2834	〃	14 57	4 55	2163	1979	68	21	4	37	19	− 7725	45865	〃
〃	$5219._2$	〃	〃	15 01		7700	7046	〃	〃	4					〃
44	5220	2830	〃	15 38	5 32	0248	0227	52	16	6	41	36	−14568	39022	〃
42	$5221._1$	2834	〃	16 22	6 16	7713	7057	66	20	6	47	19	− 7723	45867	〃
〃	$5221._2$	〃	〃	16 25		0664	0608	〃	〃	6					〃
〃	5222	2848	〃	17 21	7 12	2878	2633	64	20	7	54	14	− 5699	47891	〃
〃	$5223._1$	〃	V 26	8 44		2990	2736	65	20	2					〃
〃	$5223._2$	〃	〃	8 48		0546	0500	〃	〃	2					〃
〃	$5224._1$	J. 2865	〃	10 01	8 25	6772	6196	63	19	1	63	0	0	53590	〃

Route 40_7 B.M.J.2865—B.M.2415—Minamata—B.M.J.2865.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	7.19 × $\Sigma\delta T$ Drift	Adjustment	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m										
42	5198	J. 2865	V 24	15 34	0 00	4076	3730	65	20	10	0	0	0	53590	91
〃	5199	2408	〃	16 30	56	2928	2679	55	17	10	6	4	−1064	52526	〃
〃	5200	2411	〃	16 46	1 12	2335	2137	40	12	10	9	6	−1616	51974	〃
〃	5201	2415	〃	17 10	1 36	2360	2159	39	12	10	12	6	−1597	51993	〃
〃	Minamata 5202		〃	17 30	1 56	2667	2440	71	22	8	14	5	−1309	52281	〃
〃	〃 5203		V 25	8 45		2764	2529	〃	〃	0					〃
〃	5204	J. 2865	〃	9 59	3 10	4202	3845	63	19	0	23	0	0	53590	〃

Route 40_8 B.M.1874—(No.5277)—B.M.4313—B.M.4307—B.M.4334—B.M.4313—B.M.1874.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.60 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
42	$5276._2$	1874	V 29	9 51	0 00	3706	3391	77	24	17	0	0	56155	93
〃	$5277._1$	*	〃	11 12	1 21	5925	5421	—	—	15	8	1996	58151	〃
〃	$5277._2$	〃	〃	11 14		4045	3701	—	—	15				〃
〃	5278	4313	〃	14 37	4 44	3421	3130	76	23	− 4	26	1411	57566	〃
〃	5279	4311	〃	15 01	5 08	2894	2648	69	21	− 4	29	924	57079	〃
〃	5280	4309	〃	15 27	5 34	3277	2998	94	29	− 4	31	1280	57435	〃
〃	5281	4307	〃	15 41	5 48	3623	3315	72	22	− 7	32	1586	57741	〃
〃	5282	4315	〃	16 49	6 56	2931	2682	52	16	− 8	39	939	57094	〃
〃	$5283._1$	4317	〃	18 09	8 16	1247	1141	84	26	− 7	46	− 598	55557	〃
〃	$5283._2$	〃	〃	18 13		6374	5832	〃	〃	− 7				〃

* Misumi ferry wharf.

Table VII. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	5.60 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
42	5284	4317	V 30	9 38		6473	5923	87	27	18				93
〃	5285	4318	〃	9 52	8 30	5115	4680	173	53	18	48	−1817	54338	〃
〃	5286	4320	〃	10 13	8 51	5323	4871	104	32	18	50	−1649	54506	〃
〃	5287	4322	〃	10 31	9 09	4859	4446	63	19	19	52	−2088	54067	〃
〃	5288	4324	〃	10 58	9 36	6472	5922	60	19	19	54	− 614	55541	〃
〃	5289.$_1$	4327	〃	11 31	10 09	7353	6728	61	19	17	57	187	56342	〃
〃	5289.$_2$	〃	〃	11 36		3706	3391	〃	〃	17				〃
〃	5290	4328*	〃	11 53	10 26	3696	3382	48	15	17	58	173	56328	〃
〃	5291	4328	〃	12 19	10 52	3719	3403	65	20	17	61	196	56351	〃
〃	5292	4330	〃	12 50	11 23	3268	2990	60	19	12	64	− 226	55929	〃
〃	5293	4332	〃	13 17	11 50	1854	1696	10	3	12	66	−1538	54617	〃
〃	5294	4334	〃	13 56	12 29	2749	2515	59	18	6	70	− 714	55441	〃
〃	5295	4317	〃	17 12	15 45	2890	2644	84	26	− 9	88	− 610	55545	〃
〃	5296	4313	〃	17 44	16 17	5102	4668	76	23	−10	91	1407	57562	〃
〃	5297	〃	V 31	8 27		5180	4740	〃	〃	3				〃
〃	5298.$_1$	1874	〃	13 57	21 47	3667	3355	76	23	12	122	0	56155	〃

* Old Bench Mark, beneath the floor of the school.

Table VIII. Results along the Routes 41_1, 41_2, 41_3, 41_4. (0.01mgal.).

Route 41_1 B.M.2468—B.M.2488—B.M.K.3—B.M.2468.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	4.60 × $\Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
45	5000.$_2$	2468	III 28	10 29	0 00	4597	4206	52	16	− 4	0	0	48651	89
〃	5001	2470	〃	10 49	20	4012	3671	62	19	− 2	1	− 531	48120	〃
〃	5002	2472	〃	11 07	38	3833	3507	28	9	− 2	3	− 707	47944	〃
〃	5003	2477	〃	12 02	1 33	3106	2842	33	10	− 3	7	−1376	47275	〃
〃	5004	2479	〃	12 22	1 53	2913	2665	74	23	− 3	9	−1542	47109	〃

〃	5005	2482	〃	13 48	3 19	2625	2402	62	19	− 2	15	−1814	46837	〃
〃	5006	2484	〃	14 06	3 37	3168	2899	79	24	− 2	17	−1314	47337	〃
〃	5007	2486	〃	14 20	3 51	3821	3496	52	16	− 2	18	− 726	47925	〃
〃	5008.$_1$	2488	〃	14 41	4 12	3869	3540	20	6	0	19	− 691	47960	〃
〃	5035	〃	III 29	16 58		5700	5216	20	6	1				〃
〃	5037	K. 1 *	〃	17 38	4 52	6210	5682	35	11	5	23	− 220	48431	〃
〃	5038	K. 2 *	〃	18 10	5 24	3175	2905	30	9	5	25	−3001	45650	〃
〃	5039	K. 3 *	〃	18 33	5 47	2557	2340	−19	− 6	8	27	−3580	45071	〃
〃	5040	2476	〃	20 07	7 21	4884	4469	72	22	10	34	−1428	47223	〃
〃	5041	2474	〃	20 30	7 44	4889	4473	71	22	11	35	−1424	47227	〃
〃	5042	2468	〃	21 26	8 40	6456	5907	55	17	11	40	0	48651	〃

* Earthquake Research Institute Bench Marks.

Route 41$_2$ B.M.2468—**B.M.345**—B.M.2468.

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	$0.9150 \times SD$	h (cm)	$0.3086 \times h$	$E.T.$	$7.30 \times \Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
45	5083	2468	IV 1	9 45	0 00	4242	3881	58	18	9	0	0	48651	90
〃	5084	**837**	〃	10 35	50	4036	3693	60	19	10	6	− 192	48459	〃
〃	5085	**834**	〃	10 55	1 10	5055	4625	64	20	10	9	738	49389	〃
〃	5086	**832**	〃	11 09	1 24	4575	4186	62	19	11	10	298	48949	〃
〃	5087	**830**	〃	11 19	1 34	4812	4403	56	17	11	12	511	49162	〃
〃	5088	**827**	〃	11 34	1 49	4854	4441	54	17	9	13	546	49197	〃
〃	5089	**825**	〃	11 48	2 03	3887	3557	62	19	9	15	− 338	48313	〃
〃	5090	**822**	〃	12 10	2 25	2927	2678	59	18	9	18	−1221	47430	〃
〃	5091.$_1$	**819**	〃	12 31	2 46	0475	0435	59	18	6	20	−3469	45182	〃
〃	5091.$_2$	〃	〃	12 37		3202	2930	59	18	6				〃
〃	5092	**843**	〃	12 50	2 59	3918	3585	60	19	6	22	−2815	45836	〃
〃	5093	**816**	〃	13 15	3 24	2277	2083	62	19	6	25	−4320	44331	〃
〃	5094	**814**	〃	14 19	4 28	1258	1151	57	18	0	33	−5267	43384	〃
〃	5095	**812**	〃	14 37	4 46	0446	0408	58	18	− 5	35	−6017	42634	〃
〃	5096	**810**	〃	14 50	4 59	1963	1796	65	20	− 5	37	−4629	44022	〃

* B.M. Printed in Gothic type are 2nd order bench marks.

Table VIII. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\Sigma\delta T$	SD	$0.9150 \times SD$	h (cm)	$0.3086 \times h$	$E.T.$	$7.30 \times \Sigma\delta T$ Drift	$\Sigma\delta g$	g 979.	Field Note No.
				h m	h m									
45	5097	**808**	IV 1	15 03	5 12	2802	2564	61	19	− 5	38	−3863	44788	90
〃	5098	**840**	〃	15 30	5 39	3403	3114	63	19	− 8	42	−3320	45331	〃
〃	5099	**806**	〃	15 54	6 03	4560	4172	61	19	− 8	45	−2265	46386	〃
〃	5100	**803**	〃	16 17	6 26	4963	4541	58	18	− 8	47	−1899	46752	〃
〃	5101	**800**	〃	16 45	6 54	4558	4171	54	17	− 9	50	−2274	46377	〃
〃	5102	**797**	〃	17 09	7 18	5822	5327	63	19	− 9	53	−1119	47532	〃
〃	5103	**368**	〃	17 31	7 40	7769	7109	65	20	− 7	56	663	49314	〃
〃	5104	Makurazaki W.S.*	〃	17 48	7 57	7334	6711	76	23	− 7	58	266	48917	〃
〃	5105.1		〃	18 26	8 35	7823	7158	—	—	− 7	63	685	49336	〃
〃	5105.2		〃	18 30		1553	1421	—	—	− 2				〃
〃	5106	**365**	〃	18 35	8 40	1743	1595	66	20	− 2	64	878	49529	〃
〃	5107	**362**	〃	18 53	8 58	0414	0379	55	17	− 2	66	− 343	48308	〃
〃	5108	**359**	〃	19 15	9 20	1475	1350	63	19	− 2	68	628	49279	〃
〃	5109	**356**	〃	19 38	9 43	2055	1880	51	16	2	71	1156	49807	〃
〃	5110	**353**	〃	20 03	10 08	2249	2058	65	20	2	74	1335	49986	〃
〃	5111	**350**	〃	20 24	10 29	2387	2184	55	17	2	77	1455	50106	〃
〃	5112	〃	IV 2	9 28		2483	2272	56	17	4				〃
〃	5113	**347**	〃	9 50	10 51	2867	2623	64	20	9	80	1811	50462	〃
〃	5114	**345**	〃	10 20	11 21	2480	2269	69	21	9	83	1455	50106	〃
〃	5115	2468	〃	11 36	12 37	0898	0822	59	18	13	92	0	48651	〃

* Weather Station, concrete floor of the entrance porch.

B.M. printed in Gothic type are 2nd order bench marks.

Route 41_3 B.M.2468—B.M.2454—B.M.4348—B.M.2415—B.M.2468.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	2.62 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
45	5043	2468	III 30	9 56	0 00	6611	6049	59	18	− 2	0	0	48651	89
〃	5044	Kagoshima M.O. *	〃	10 21	25	6265	5732	11	2	1	− 333	48318	〃	
〃	5045.1	2466	〃	12 04	2 08	7228	6614	86	27	− 1	6	565	49216	〃
〃	5045.2	〃	〃	12 09		5562	5089	〃	〃	− 1				〃
〃	5046	2464	〃	12 28	2 27	5944	5439	47	15	− 1	7	902	49553	〃
〃	5047	2462	〃	12 41	2 40	3617	3310	64	20	− 3	7	−1224	47427	〃
〃	5048	2460	〃	12 56	2 55	4260	3898	45	14	− 3	8	− 643	48008	〃
〃	5049	2458	〃	13 10	3 09	4567	4179	65	20	− 3	8	− 356	48295	〃
〃	5050	2456	〃	13 25	3 24	6006	5495	5	2	− 3	9	941	49592	〃
〃	5051	2454	〃	13 42	3 41	6581	6022	49	15	− 4	10	1479	50130	〃
〃	5052	2452	〃	14 52	4 51	6955	6364	72	22	− 4	13	1825	50476	〃
〃	5053	2450	〃	15 05	5 04	6614	6052	50	15	− 4	13	1506	50157	〃
〃	5054.1	2448	〃	15 18	5 17	7249	6633	58	18	− 4	14	2089	50740	〃
〃	5054.2	〃	〃	15 21		1630	1491	〃	〃	− 4				〃
〃	5055	2446	〃	15 37	5 33	1513	1384	60	19	− 2	15	1984	50635	〃
〃	5056	2445	〃	15 55	5 51	1308	1197	62	19	− 2	15	1797	50448	〃
〃	5057	2442	〃	16 15	6 11	1885	1725	85	27	− 2	16	2332	50983	〃
〃	5058	2439	〃	16 32	6 28	3197	2925	53	16	0	17	3522	52173	90
〃	5059	2438	〃	16 41	6 37	3228	2954	70	22	0	17	3557	52208	〃
〃	5060	2436	〃	16 52	6 48	2882	2637	27	8	0	18	3225	51876	〃
〃	5061	2434	〃	17 09	7 05	3204	2932	54	17	0	19	3528	52179	〃
〃	5062	2432	〃	17 28	7 24	3684	3371	70	22	0	19	3972	52623	〃
〃	5063	2429	〃	18 00	7 56	4257	3895	67	21	4	21	4497	53148	〃
〃	5064	2427	〃	18 16	8 12	3149	2881	53	16	4	21	3478	52129	〃
〃	5065	Akune W.S. **	〃	18 37	8 33	3085	2823	72	22	7	23	3427	52078	〃

* Meteorological Observatory, near the well in the observation field.

** Weather Station Bench Mark.

Table VIII. (Continued)

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	2.62 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
45	5066	J. 2428	III 30	18 44	8 40	3642	3332	59	18	7	23	3932	52583	90
〃	5067	〃	III 31	8 19		3733	3416	58	18	1				〃
〃	5068	4348	〃	9 28	9 49	3965	3628	30	9	4	26	4135	52786	〃
〃	5074	〃	〃	15 15		3985	3646	31	10	− 6				〃
〃	5075	4349	〃	15 32	10 06	3395	3106	49	15	− 7	26	3599	52250	〃
〃	5076	2425	〃	16 52	11 26	3669	3357	41	13	− 5	30	3846	52497	〃
〃	5077	2422	〃	17 13	11 47	3048	2789	49	15	− 5	31	3279	51930	〃
〃	5078	2420	〃	17 30	12 04	3114	2849	57	18	− 2	32	3344	51995	〃
〃	5079	2418	〃	17 44	12 18	3140	2873	61	19	− 2	32	3369	52020	〃
42	$5080._1$	2415	〃	18 11	12 45	3119	2854	42	13	− 2	34	3342	51993	〃
〃	$5080._2$	〃	〃	18 17		7817	7153	〃	〃	− 2				〃
45	5081	2454	〃	20 55	15 23	5773	5282	54	17	10	40	1481	50132	〃
〃	5082	〃	IV 1	8 45		5862	5364	54	17	5				〃
〃	5083	2468	〃	9 45	16 23	4242	3881	58	18	9	43	0	48651	〃

Route 41_4 B.M.4348—B.M.4336—B.M.4348.

Pref.	No.	B.M.	Date 1954	Time	$\sum\delta T$	SD	0.9150 × SD	h (cm)	0.3086 × h	$E.T.$	1.55 × $\sum\delta T$ Drift	$\sum\delta g$	g 979.	Field Note No.
				h m	h m									
45	5068	4348	III 31	9 28	0 00	3965	3628	30	9	4	0	0	52786	90
〃	5069	4347	〃	10 01	33	4336	3967	49	15	6	1	346	53132	〃
〃	5070	4345	〃	10 56	1 28	2465	2255	21	6	5	2	−1377	51409	〃
〃	5071	4340	〃	11 54	2 26	4032	3689	43	13	3	4	60	52846	〃
〃	5072	4338	〃	12 29	3 01	4352	3982	42	13	3	5	352	53138	〃
〃	5073	4336	〃	13 11	3 43	5230	4785	28	9	0	6	1147	53933	〃
〃	5074	4348	〃	15 15	5 47	3985	3646	31	10	− 6	9	0	52786	〃

(39) Fukuoka Prefecture.

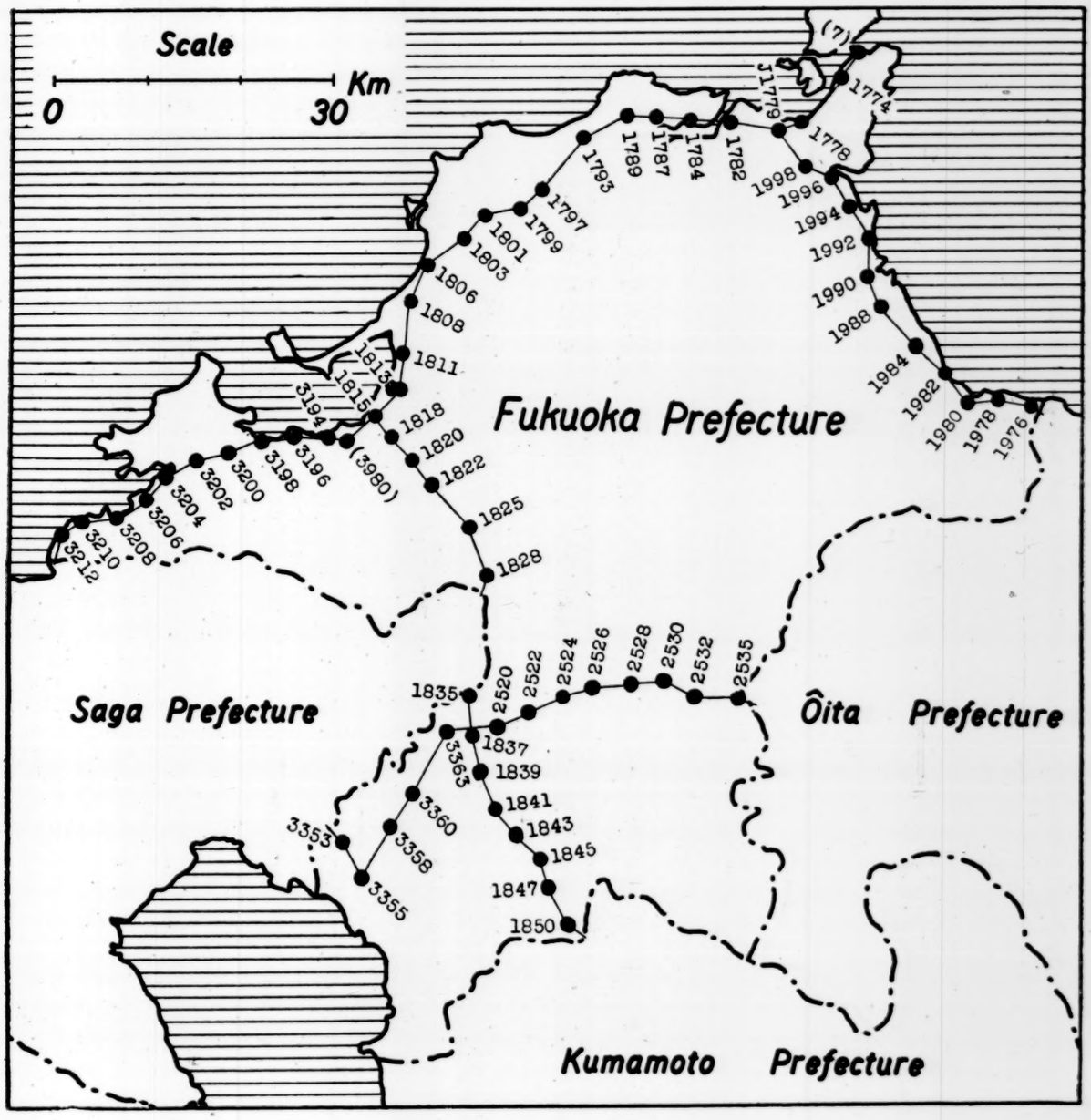

Fig. 7. Gravity Stations in Fukuoka Prefecture.

Table IX. Synoptic Results for Fukuoka Prefecture (I).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
(7)	3814	57.4	57.8	4.14	V 13	68562	6869	6864	6420	44.9	44.4	6578	29.1	28.6
1774	3813	55.9	57.1	23.92	〃	67861	6850	6833	6399	46.1	43.4	6557	30.3	27.6
1778	3812	53.0	53.9	3.11	〃	67671	6777	6773	6359	41.8	41.4	6517	26.0	25.6
J. 1779	3811	53.0	52.7	3.30	〃	67488	6759	6755	6359	40.0	39.6	6517	24.2	23.8
1782	3809	53.9	49.4	3.51	V 12	67790	6790	6783	6371	41.9	41.5	6529	26.1	25.7
1784	3808	53.4	47.3	2.09	〃	68105	6817	6815	6364	45.3	45.1	6522	29.5	29.3
1787	3807	53.5	44.1	1.53	〃	67255	6730	6729	6366	36.4	36.3	6524	20.6	20.5
1789	3806	53.4	42.0	1.87	〃	67299	6736	6734	6364	37.2	37.0	6522	21.4	21.2
1793	3805	52.1	39.2	33.60	〃	67361	6840	6802	6346	49.4	45.6	6504	33.6	29.8
1797	3804	49.0	36.4	70.16	〃	66609	6877	6799	6303	57.4	49.6	6461	41.6	33.8
1799	3803	48.1	34.8	9.42	〃	67704	6800	6789	6290	51.0	49.9	6449	35.1	34.0
1801	3802	47.9	32.3	9.59	〃	67655	6795	6784	6288	50.7	49.6	6446	34.9	33.8
1803	3801	46.4	31.0	29.36	〃	66978	6788	6756	6267	52.1	48.9	6425	36.3	33.1
1806	3800	44.4	28.3	8.90	〃	67528	6780	6770	6239	54.1	53.1	6397	38.3	37.3
1808	3799	42.6	26.9	7.17	〃	67240	6746	6738	6214	53.2	52.4	6372	37.4	36.6
1811	3798	39.6	26.8	6.44	〃	66538	6674	6667	6172	50.2	49.5	6331	34.3	33.6
1813	3797	37.6	26.8	2.91	〃	65312	6540	6537	6144	39.6	39.3	6303	23.7	23.4
1815	3796	36.2	25.2	3.90	〃	64609	6473	6469	6125	34.8	34.4	6284	18.9	18.5
1818	3832	34.9	26.2	5.88	V 14	64284	6447	6440	6107	34.0	33.3	6266	18.1	17.4
1820	3833	33.3	27.8	10.85	〃	63709	6404	6392	6085	31.9	30.7	6244	16.0	14.8
1822	3834	31.6	29.3	20.72	〃	63109	6375	6352	6061	31.4	29.1	6220	15.5	13.2
1825	3835	29.3	31.6	37.40	〃	62356	6351	6309	6029	32.2	28.0	6188	16.3	12.1
1828	3836	27.0	32.6	42.55	〃	62093	6341	6293	5997	34.4	29.6	6157	18.4	13.6
1835	3839	19.8	31.6	7.86	〃	62249	6249	6240	5898	35.1	34.2	6057	19.2	18.3
1837	3840	17.7	31.8	19.58	〃	60658	6126	6104	5869	25.7	23.5	6028	9.8	7.6
1839	3841	15.7	32.5	39.23	〃	61414	6263	6219	5841	42.2	37.8	6001	26.2	21.8
1841	3842	13.8	33.4	43.20	〃	61615	6295	6247	5815	48.0	43.2	5974	32.1	27.3
1843	3843	12.7	34.8	33.56	〃	61599	6264	6226	5800	46.4	42.6	5959	30.5	26.7
1845	3844	11.2	36.8	53.36	〃	60863	6251	6191	5779	47.2	41.2	5939	31.2	25.2
1847	3845	09.3	37.3	80.61	〃	59999	6249	6159	5753	49.6	40.6	5913	33.6	24.6

1850 *	3846	07.0	38.8	149.58	1954 V 23	〃	58277	6289	6122	5721	56.8	40.1	5881	40.8	24.1
〃 **	5175	〃	〃	149.56			58260	6288	6120	〃	56.7	39.9	〃	40.7	23.9

* Removed after this gravity measurement.

** New Bench Mark (different from the preceding B.M. 1850.)

Synoptic Results for Fukuoka Prefecture (II).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
1998	3818	50.6	54.4	29.26	V 13	67136	6804	6771	6325	47.9	44.6	6483	32.1	28.8
1996	3819	49.7	56.7	3.31	〃	67484	6759	6755	6313	44.6	44.2	6471	28.8	28.4
1994	3820	48.0	58.0	4.56	〃	67191	6733	6728	6289	44.4	43.9	6447	28.6	28.1
1992	3821	46.3	59.1	4.30	〃	67199	6733	6728	6265	46.8	46.3	6424	30.9	30.4
1990	3822	44.3	58.7	3.40	〃	66349	6645	6642	6237	40.8	40.5	6396	24.9	24.6
1988	3823	42.7	59.4	7.57	〃	66247	6648	6640	6215	43.3	42.5	6374	27.4	26.6
			131°											
1984	3824	39.8	02.8	11.84	〃	65966	6633	6620	6175	45.8	44.5	6334	29.9	28.6
1982	3825	38.3	04.2	6.67	〃	65797	6600	6593	6154	44.6	43.9	6313	28.7	28.0
1980	3826	37.0	06.0	14.16	〃	65249	6569	6553	6136	43.3	41.7	6295	27.4	25.8
1978	3827	37.1	08.1	3.07	〃	65421	6552	6548	6137	41.5	41.1	6296	25.6	25.2
1976	3828	36.4	10.3	5.24	〃	65396	6556	6550	6128	42.8	42.2	6287	26.9	26.3

Synoptic Results for Fukuoka Prefecture (III).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
Fukuoka M.O. *	3980	34.8	22.7	2.78	V 21	64078	6416	6413	6105	31.1	30.8	6264	15.2	14.9
3194	3979	34.9	22.0	4.71	〃	64236	6438	6433	6107	33.1	32.6	6266	17.2	16.7
3196	3978	35.1	19.6	3.92	〃	64616	6474	6469	6110	36.4	35.9	6269	20.5	20.0
3198	3977	34.7	17.3	9.92	〃	65020	6533	6522	6104	42.9	41.8	6263	27.0	25.9
3200	3976	34.3	15.2	9.74	〃	64849	6515	6504	6098	41.7	40.6	6257	25.8	24.7
3202	3975	33.5	12.8	5.63	〃	64776	6495	6489	6087	40.8	40.2	6246	24.9	24.3
3204	3974	32.6	11.0	3.16	〃	65006	6510	6507	6075	43.5	43.2	6234	27.6	27.3
3206	3973	31.4	09.1	3.23	〃	64941	6504	6501	6058	44.6	44.3	6217	28.7	28.4
3208	3972	30.3	07.5	7.96	〃	64738	6498	6490	6043	45.5	44.7	6202	29.6	28.8
3210	3971	30.1	05.3	2.57	〃	65128	6521	6518	6040	48.1	47.8	6199	32.2	31.9
3212	3969	29.3	03.0	6.65	V 20	65025	6523	6516	6029	49.4	48.7	6188	33.5	32.8

* Meteorological Observatory Seismometer Room, on the surface of the concrete block for seismometer installation.

Synoptic Results for Fukuoka Prefecture (IV).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
2520	3849	18.5	33.7	18.43	V 15	61740	6231	6210	5880	35.1	33.0	6039	19.2	17.1
2522	3850	19.1	35.8	10.58	〃	60865	6119	6107	5888	23.1	21.9	6047	7.2	6.0
2524	3851	19.7	38.0	12.10	〃	61091	6146	6133	5896	25.0	23.7	6056	9.0	7.7
2526	3852	20.4	40.2	14.99	〃	60354	6082	6065	5906	17.6	15.9	6065	1.7	0.0
2528	3853	20.6	42.4	20.73	〃	59945	6059	6035	5909	15.0	12.6	6068	− 0.9	− 3.3
2530	3854	20.6	44.8	28.24	〃	59617	6049	6017	5909	14.0	10.8	6068	− 1.9	− 5.1
2532	3855	20.0	46.9	36.67	〃	58801	5993	5952	5901	9.2	5.1	6060	− 6.7	−10.8
2535	3856	20.1	50.3	69.03	〃	58489	6062	5985	5902	16.0	8.3	6061	0.1	− 7.6

Synoptic Results for Fukuoka Prefecture (V).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
3363	3859	17.4	29.8	10.26	V 15	60206	6052	6041	5865	18.7	17.6	6024	2.8	1.7
3360	3860	14.8	27.8	5.35	〃	60297	6046	6040	5829	21.7	21.1	5988	5.8	5.2
3358	3861	12.9	26.6	4.74	〃	60291	6044	6038	5803	24.1	23.5	5962	8.2	7.6
3355	3862	10.1	24.6	4.16	〃	60095	6022	6018	5764	25.8	25.4	5924	9.8	9.4
3353	3863	11.6	23.0	3.82	〃	59767	5989	5984	5785	20.4	19.9	5944	4.5	4.0

(40) **Saga Prefecture.**

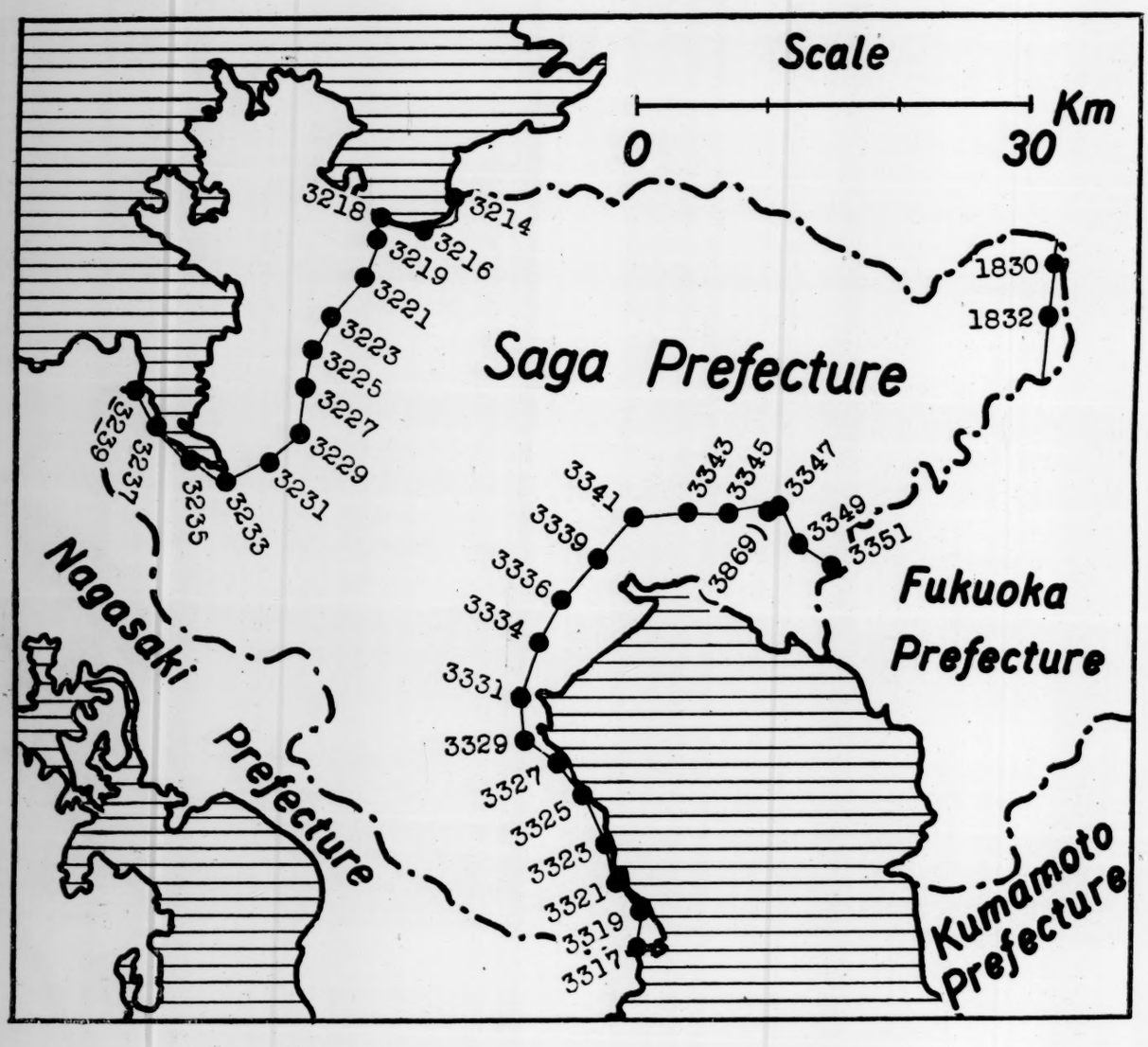

Fig. 8. Gravity Stations in Saga Prefecture.

Table X. Synoptic Results for Saga Prefecture (I)

B.M.	No.	φ	λ	H (m)	Date 1953	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		33° ′	130°′											
3214	3968	27.6	02.3	7.38	V 20	64594	6482	6474	6006	47.6	46.8	6165	31.7	30.9
3216	3967	26.4	01.3	5.16	〃	64092	6425	6419	5989	43.6	43.0	6148	27.7	27.1
			129°											
3218	3966	26.9	59.1	2.36	〃	63921	6399	6397	5996	40.3	40.1	6155	24.4	24.2
3219	3965	26.1	59.3	3.79	〃	63842	6396	6392	5985	41.1	40.7	6144	25.2	24.8
3221	3964	24.3	58.7	5.29	〃	63092	6326	6320	5960	36.6	36.0	6119	20.7	20.1
3223	3963	23.0	57.0	6.05	〃	62512	6270	6263	5942	32.8	32.1	6101	16.9	16.2
3225	3962	21.6	56.2	9.29	〃	62013	6230	6220	5923	30.7	29.7	6082	14.8	13.8
3227	3961	19.8	56.0	20.48	〃	61673	6231	6208	5898	33.3	31.0	6057	17.4	15.1
3229	3960	18.0	55.7	37.09	〃	61295	6244	6203	5873	37.1	33.0	6032	21.2	17.1
3231	3959	16.7	54.0	16.41	〃	61817	6232	6214	5855	37.7	35.9	6014	21.8	20.0
3233	3958	15.9	52.2	3.43	〃	62281	6239	6235	5844	39.5	39.1	6003	23.6	23.2
3235	3957	17.0	50.3	2.11	〃	62293	6236	6233	5859	37.7	37.4	6019	21.7	21.4
3237	3956	18.4	48.8	2.79	〃	62233	6232	6229	5878	35.4	35.1	6038	19.4	19.1
3239	3955	20.0	47.5	4.00	〃	62416	6254	6249	5901	35.3	34.8	6060	19.4	18.9

Synoptic Results for Saga Prefecture (II).

B.M.	No.	φ	λ	H (m)	Date 1953	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		33° ′	130°′											
1830	3837	25.0	32.1	30.65	V 14	61960	6291	6256	5970	32.1	28.6	6129	16.2	12.7
1832	3838	22.9	31.7	18.92	〃	62219	6280	6259	5941	33.9	31.8	6100	18.0	15.9

Synoptic Results for Saga Prefecture (III).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
3351	3864	12.7	21.4	3.27	V 15	59631	5973	5970	5800	17.3	17.0	5959	1.4	1.1
3349	3865	13.8	20.0	3.63	〃	60077	6019	6015	5815	20.4	20.0	5974	4.5	4.1
Saga W.S. *	3869	14.6	18.3	4.10	V 16	60503	6063	6058	5826	23.7	23.2	5985	7.8	7.3
3347	3866	14.9	18.8	4.22	V 15	60483	6061	6057	5830	23.1	22.7	5990	7.1	6.7
3345	3867	14.7	17.0	4.06	〃	60689	6081	6077	5827	25.4	25.0	5987	9.4	9.0
3343	3870	14.7	14.5	4.30	V 16	61005	6114	6109	5827	28.7	28.2	5987	12.7	12.2
3341	3871	14.7	12.2	3.82	〃	61793	6191	6187	5827	36.4	36.0	5987	20.4	20.0
3339	3872	13.3	10.7	4.41	〃	61405	6154	6149	5808	34.6	34.1	5968	18.6	18.1
3336	3873	11.6	08.3	3.40	〃	59804	5991	5987	5785	20.6	20.2	5944	4.7	4.3
3334	3874	09.7	07.4	3.32	〃	59413	5952	5948	5758	19.4	19.0	5918	3.4	3.0
3331	3875	07.4	06.3	2.71	〃	59428	5951	5948	5727	22.4	22.1	5886	6.5	6.2
3329	3876	05.9	06.6	4.50	〃	59445	5958	5953	5706	25.2	24.7	5866	9.2	8.7
3327	3877	04.8	08.4	4.65	〃	59703	5985	5979	5691	29.4	28.8	5851	13.4	12.8
3325	3878	03.4	09.7	16.61	〃	59694	6021	6002	5672	34.9	33.0	5831	19.0	17.1
3323	3879	01.8	10.5	4.17	〃	60382	6051	6046	5650	40.1	39.6	5809	24.2	23.7
3321	3880	00.2	11.3	31.02	〃	59859	6082	6047	5628	45.4	41.9	5787	29.5	26.0
		32°												
3319	3881	59.2	12.2	21.38	〃	60527	6119	6095	5614	50.5	48.1	5774	34.5	32.1
3317	3882	57.6	12.3	37.62	〃	60449	6161	6119	5592	56.9	52.7	5752	40.9	36.7

*Weather Station Bench Mark.

(41) Nagasaki Prefecture.

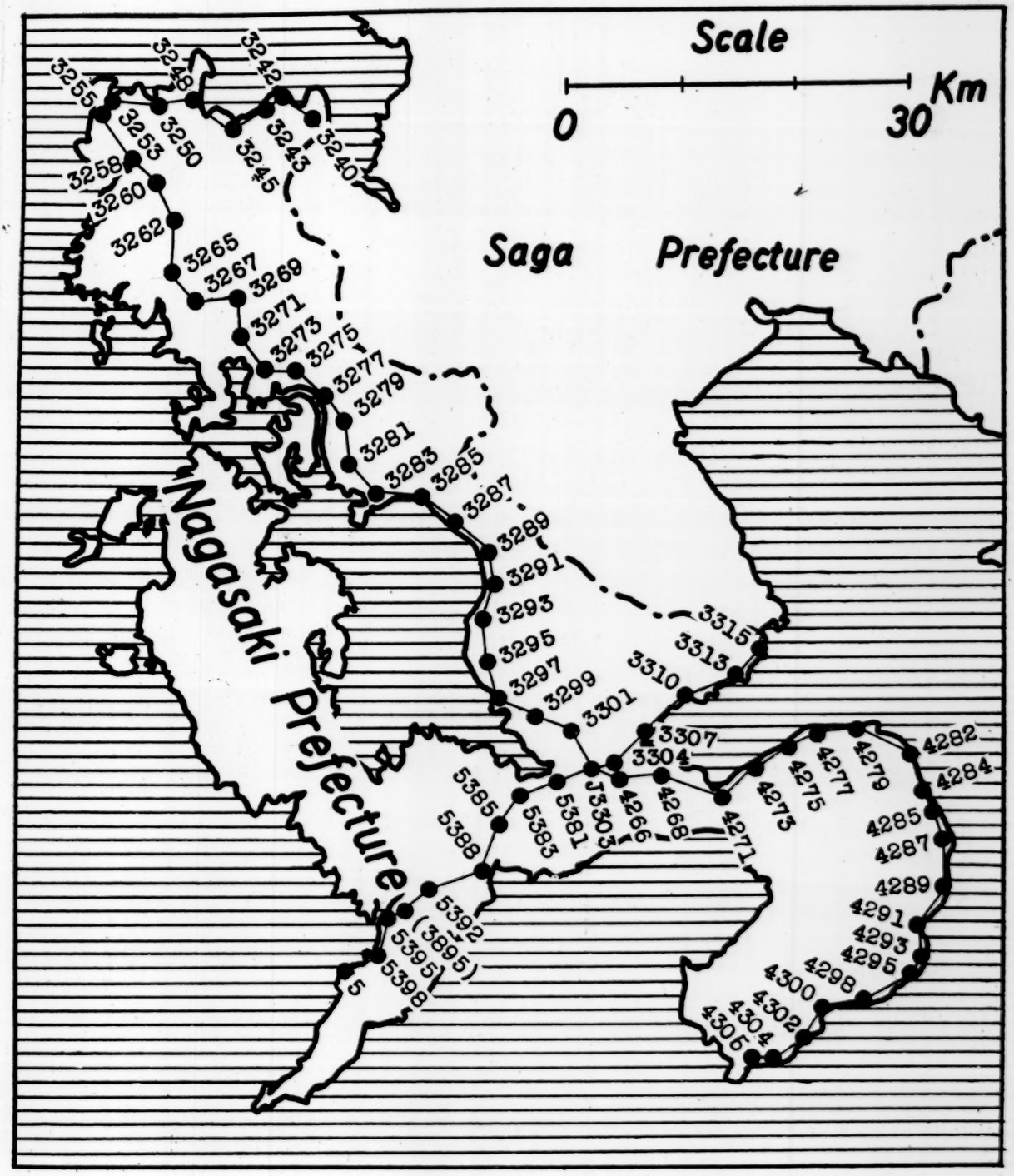

Fig. 9. Gravity Stations in Nagasaki Prefecture.

Table XI. Synoptic Results for Nagasaki Prefecture (I)

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	129°′											
3240	3954	20.7	46.8	6.39	V 20	62557	6275	6268	5910	36.5	35.8	6070	20.5	19.8
3242	3953	21.8	45.1	27.58	〃	62521	6337	6306	5925	41.2	38.1	6085	25.2	22.1
3243	3952	21.3	44.4	8.98	〃	62967	6324	6314	5919	40.5	39.5	6078	24.6	23.6
3245	3951	20.4	42.5	3.26	〃	63353	6345	6342	5906	43.9	43.6	6065	28.0	27.7
3248	3950	21.6	40.0	20.46	〃	63220	6385	6362	5923	46.2	43.9	6082	30.3	28.0
3250	3949	21.1	38.1	18.18	〃	63134	6370	6349	5916	45.4	43.3	6075	29.5	27.4
3253	3947	21.5	35.4	20.11	V 19	62856	6348	6325	5921	42.7	40.4	6081	26.7	24.4
3255	3946	20.6	35.4	39.79	〃	62316	6354	6310	5909	44.5	40.1	6068	28.6	24.2
3258	3945	18.9	37.0	3.59	〃	63108	6322	6318	5885	43.7	43.3	6045	27.7	27.3
3260	3944	17.7	38.3	8.75	〃	62925	6320	6310	5869	45.1	44.1	6028	29.2	28.2
3262	3943	16.2	39.3	117.07	〃	60550	6416	6285	5848	56.8	43.7	6008	40.8	27.7
3265	3942	13.8	39.2	4.25	〃	62483	6261	6257	5815	44.6	44.2	5974	28.7	28.3
3267	3941	12.4	40.3	27.82	〃	61775	6263	6232	5796	46.7	43.6	5955	30.8	27.7
3269	3940	12.5	42.6	40.98	〃	61309	6257	6212	5797	46.0	41.5	5957	30.0	25.5
3271	3939	10.9	43.2	19.28	〃	61835	6243	6221	5775	46.8	44.6	5935	30.8	28.6
3273	3938	09.3	44.3	20.15	〃	61827	6245	6222	5753	49.2	46.9	5913	33.2	30.9
3275	3937	09.4	46.5	27.07	〃	61241	6208	6177	5754	45.4	42.3	5914	29.4	26.3
3277	3936	08.1	47.7	3.68	〃	61443	6156	6152	5736	42.0	41.6	5896	26.0	25.6
3279	3935	06.4	49.2	36.55	〃	60278	6141	6100	5713	42.8	38.7	5873	26.8	22.7
3281	3934	04.5	49.5	60.07	〃	59444	6130	6063	5687	44.3	37.6	5847	28.3	21.6
3283	3933	03.3	51.0	35.52	〃	59557	6065	6026	5670	39.5	35.6	5830	23.5	19.6
3285	3932	03.6	52.9	3.44	〃	59796	5990	5986	5674	31.6	31.2	5834	15.6	15.2
3287	3931	02.3	54.7	2.69	〃	59330	5941	5938	5657	28.4	28.1	5816	12.5	12.2
3289	3930	01.0	56.7	5.94	〃	59043	5923	5916	5639	28.4	27.7	5798	12.5	11.8
		32°												
3291	3929	59.3	57.1	20.58	〃	58518	5915	5892	5615	30.0	27.7	5775	14.0	11.7

	3293	3928	57.5	56.7	6.25	〃	58848	5904	5897	5591	31.3	30.6	5751	15.3	14.6
	3295	3926	55.4	57.2	19.10	V 18	58627	5922	5900	5562	36.0	33.8	5722	20.0	17.8
	3297	3925	53.7	58.0	2.44	〃	59069	5914	5912	5538	37.6	37.4	5698	21.6	21.4
	3299	3924	53.1	59.8	12.86	〃	58597	5899	5885	5530	36.9	35.5	5690	20.9	19.5
				130°											
	3301	3923	52.2	01.6	39.22	〃	57958	5917	5873	5518	39.9	35.5	5678	23.9	19.5
J.	3303	3888	50.7	02.8	8.70	V 16	58555	5882	5873	5497	38.5	37.6	5657	22.5	21.6
	3304	3887	50.9	03.8	3.00	〃	58541	5863	5860	5500	36.3	36.0	5660	20.3	20.0
	3307	3886	52.5	06.2	2.02	〃	58877	5894	5892	5522	37.2	37.0	5682	21.2	21.0
	3310	3885	54.0	08.1	4.21	〃	59479	5961	5956	5542	41.9	41.4	5703	25.8	25.3
	3313	3884	54.8	11.0	5.90	〃	60543	6073	6036	5553	52.0	51.3	5714	35.9	35.2
	3315	3883	55.8	12.2	4.61	〃	61454	6160	6154	5567	59.3	58.7	5727	43.3	42.7

Synoptic Results for Nagasaki Prefecture (II).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130°′											
4266	3901	49.8	04.8	2.85	V 17	58459	5855	5852	5485	37.0	36.7	5645	21.0	20.7
4268	3902	49.6	06.8	3.67	〃	58303	5842	5838	5482	36.0	35.6	5642	20.0	19.6
4271	3903	48.8	09.4	3.90	〃	58315	5844	5839	5471	37.3	36.8	5631	21.3	20.8
4273	3904	49.9	11.0	4.86	〃	58916	5907	5901	5486	42.1	41.5	5646	26.1	25.5
4275	3905	51.1	12.9	4.33	〃	59638	5977	5972	5503	47.4	46.9	5663	31.4	30.9
4277	3906	52.2	15.0	6.31	〃	60559	6075	6068	5518	55.7	55.0	5678	39.7	39.0
4279	3907	52.4	17.3	4.68	〃	60942	6109	6103	5520	58.9	58.3	5681	42.8	42.2
4282	3908	51.2	20.4	4.06	〃	60342	6047	6042	5504	54.3	53.8	5664	38.3	37.8
4284	3909	49.2	21.3	4.31	〃	59127	5926	5921	5476	45.0	44.5	5637	28.9	28.4
4285	3910	48.3	21.8	10.13	〃	58256	5857	5846	5464	39.3	38.2	5625	23.2	22.1
4287	3912	46.3	22.6	3.23	V 18	56867	5697	5693	5437	26.0	25.6	5597	10.0	9.6
4289	3913	44.5	22.3	17.25	〃	55313	5585	5565	5412	17.3	15.3	5573	1.2	−0.8
4291	3914	42.8	21.0	15.01	〃	55253	5572	5555	5389	18.3	16.6	5549	2.3	0.6
4293	3915	41.0	21.4	3.58	〃	54935	5505	5501	5364	14.1	13.7	5525	−2.0	−2.4
4295	3916	39.7	19.9	4.42	〃	54856	5499	5494	5346	15.3	14.8	5507	−0.8	−1.3

Table XI. (Continued)

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130°′											
4298	3917	39.0	17.1	3.76	V 18	55081	5520	5516	5337	18.3	17.9	5497	2.3	1.9
4300	3918	38.6	15.3	3.84	〃	55681	5580	5576	5331	24.9	24.5	5492	8.8	8.4
4302	3919	37.1	14.2	3.92	〃	56505	5663	5658	5311	35.2	34.7	5472	19.1	18.6
4304	3920	36.1	12.4	6.20	〃	57361	5755	5748	5297	45.8	45.1	5458	29.7	29.0
4305	3921	36.5	11.4	2.59	〃	57353	5743	5740	5303	44.0	43.7	5463	28.0	27.7

Synoptic Results for Nagasaki Prefecture (III).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1953	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130°′											
5381	3889	50.0	00.9	10.11	V 16	58478	5879	5868	5487	39.2	38.1	5648	23.1	22.0
			129°											
5383	3890	49.5	58.9	3.82	〃	58778	5890	5885	5481	40.9	40.4	5641	24.9	24.4
5385	3891	47.8	57.9	26.45	〃	58509	5933	5903	5457	47.6	44.6	5618	31.5	28.5
5388	3892	45.3	56.6	16.21	〃	58447	5895	5877	5423	47.2	45.4	5584	31.1	29.3
5392	3893	44.8	54.0	42.77	〃	58380	5970	5922	5416	55.4	50.6	5577	39.3	34.5
〃	3899	〃	〃	〃	V 17	58394	5971	5924	〃	55.5	50.8	〃	39.4	34.7
Nagasaki M.O. *	3895	43.7	52.3	26.66	〃	59844	6067	6037	5401	66.6	63.6	5562	50.5	47.5
5395	3896	43.4	51.9	11.41	〃	60231	6058	6046	5397	66.1	64.9	5558	50.0	48.8
5398	3897	41.3	51.0	2.14	〃	60778	6084	6082	5368	71.6	71.4	5529	55.5	55.3
5 **	3898	40.9	49.3	2.92	〃	60399	6049	6046	5363	68.6	68.3	5523	52.6	52.3

* Marine Observatory Bench Mark.
** Tide Gauge Station Bench Mark.

(42) Kumamoto Prefecture.

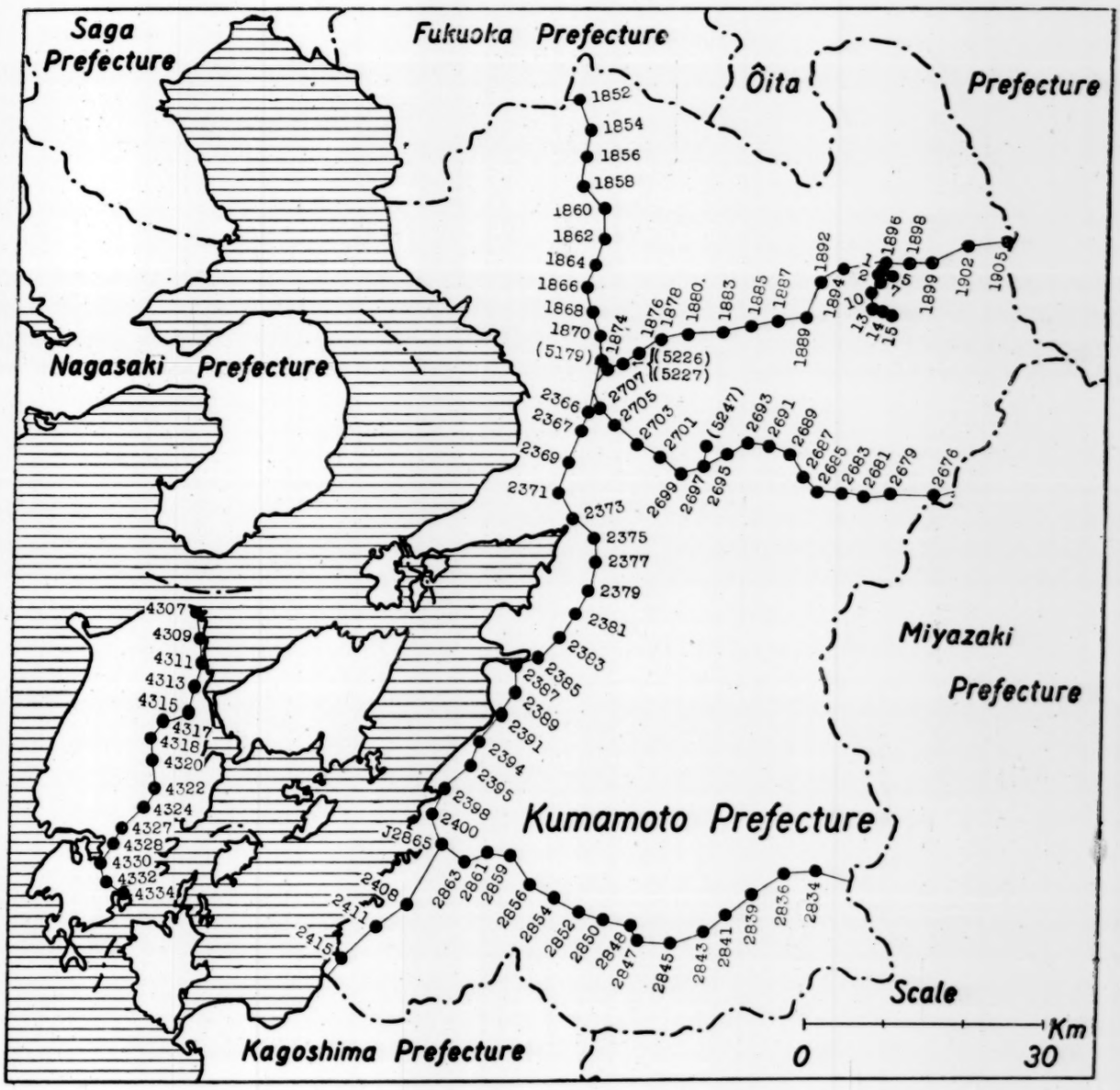

Fig. 10. Gravity Stations in Kumamoto Prefecture.

Table XII. Synoptic Results for Kumamoto Prefecture (I).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	130°′											
1852	5174	06.8	40.8	96.19	V 23	58955	6192	6085	5718	47.4	36.7	5878	31.4	20.7
1854	5173	05.4	42.0	57.53	〃	59442	6122	6057	5699	42.3	35.8	5859	26.3	19.8
1856	5172	03.4	41.7	38.27	〃	58608	5979	5936	5672	30.7	26.4	5831	14.8	10.5
1858	5171	01.4	41.2	26.27	〃	58265	5908	5878	5644	26.4	23.4	5804	10.4	7.4
		32°												
1860	5170	59.8	42.8	24.72	〃	57142	5791	5763	5622	16.9	14.1	5782	0.9	−1.9
1862	5169	58.1	43.1	25.09	〃	56805	5758	5730	5599	15.9	13.1	5759	− 0.1	−2.9
1864	5168	56.1	42.4	55.19	〃	56673	5838	5776	5571	26.7	20.5	5731	10.7	4.5
1866	5167	54.2	41.7	106.87	〃	55304	5860	5741	5545	31.5	19.6	5705	15.5	3.6
1868	5166	52.2	42.2	84.33	〃	54830	5743	5649	5518	22.5	13.1	5678	6.5	−2.9
1870	5165	50.2	42.7	69.59	〃	55105	5725	5647	5490	23.5	15.7	5650	7.5	−0.3
Kumamoto W.S. *	5179	48.7	42.6	37.90	V 24	55374	5654	5612	5470	18.4	14.2	5630	2.4	−1.8
2366	5180	46.0	41.7	8.06	〃	55924	5617	5608	5433	18.4	17.5	5593	2.4	1.5
2367	5181	45.0	41.1	4.99	〃	56020	5617	5612	5419	19.8	19.3	5579	3.8	3.3
2369	5182	42.9	40.5	4.37	〃	56688	5682	5677	5390	29.2	28.7	5551	13.1	12.6
2371	5183	40.9	39.8	4.52	〃	57613	5775	5770	5363	41.2	40.7	5523	25.2	24.7
2373	5184	38.9	40.5	3.77	〃	57835	5795	5791	5336	45.9	45.5	5496	29.9	29.5
2375	5185	37.8	42.2	15.52	〃	57359	5784	5766	5320	46.4	44.6	5481	30.3	28.5
2377	5186	36.0	42.2	3.47	〃	56618	5673	5669	5296	37.7	37.3	5457	21.6	21.2
2379	5187	34.4	41.8	11.38	〃	56516	5687	5674	5274	41.3	40.0	5435	25.2	23.9
2381	5188	32.5	40.8	12.22	〃	56285	5666	5653	5248	41.8	40.5	5409	25.7	24.4
2383	5189	30.9	39.5	4.45	〃	55727	5586	5581	5226	36.0	35.5	5387	19.9	19.4
2385	5190	30.3	37.4	5.52	〃	55820	5599	5593	5218	38.1	37.5	5379	22.0	21.4
2387	5191	29.7	36.1	3.44	〃	56028	5613	5610	5210	40.3	40.0	5371	24.2	23.9
2389	5192	27.8	36.5	2.23	〃	55166	5524	5521	5184	34.0	33.7	5345	17.9	17.6
2391	5193.1	26.1	35.3	3.07	〃	54907	5500	5497	5161	33.9	33.6	5322	17.8	17.5

* Weather Station Bench Mark.

	2394	5194	24.3	33.4	9.46	〃	54483	5478	5467	5136	34.2	33.1	5297	18.1	17.0
	2395	5195	23.4	32.8	38.21	〃	54044	5522	5480	5124	39.8	35.6	5285	23.7	19.5
	2398	5196	21.6	30.7	3.11	〃	54580	5468	5464	5099	36.9	36.5	5261	20.7	20.3
	2400	5197	20.0	29.7	36.74	〃	54325	5546	5505	5078	46.8	42.7	5239	30.7	26.6
J.	2865	5198	17.8	30.8	7.18	〃	53590	5381	5373	5048	33.3	32.5	5209	17.2	16.4
	2408	5199	13.8	28.1	21.87	〃	52526	5320	5296	4993	32.7	30.3	5155	16.5	14.1
	2411	5200	12.4	25.7	32.63	〃	51974	5298	5262	4974	32.4	28.8	5136	16.2	12.6
	2415	5201	10.6	23.1	5.59	〃	51993	5217	5210	4950	26.7	26.0	5111	10.6	9.9

Synoptic Results for Kumamoto Prefecture (II).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130°′											
1874	5248	48.2	43.0	14.31	V 27	56155	5660	5644	5463	19.7	18.1	5623	3.7	2.1
Kumamoto Univ. *	5226	48.8	43.8	22.84	V 26	56246	5695	5670	5471	22.4	19.9	5631	6.4	3.9
1876	5249	49.0	44.9	23.54	V 27	56307	5703	5677	5474	22.9	20.3	5634	6.9	4.3
1878	5250	50.6	46.3	57.82	〃	56331	5812	5747	5496	31.6	25.1	5656	15.6	9.1
1880	5251	51.3	48.7	61.03	〃	55850	5773	5705	5505	26.8	20.0	5666	10.7	3.9
1883	5252	51.4	52.4	95.39	〃	54219	5716	5610	5507	20.9	10.3	5667	4.9	− 5.7
1885	5253.$_1$	51.9	54.8	127.10	〃	53170	5709	5567	5514	19.5	5.3	5674	3.5	−10.7
1887	5254	52.4	57.0	219.13	〃	50774	5754	5508	5520	23.4	− 1.2	5681	7.3	−17.3
〃	5274.$_1$	〃	〃	〃	V 28	50781	5754	5509	〃	23.4	− 1.1	〃	7.3	−17.2
1889	5255.$_1$	52.6	59.2	379.83	V 27	47530	5925	5500	5523	40.2	− 2.3	5683	24.2	−18.3
			131°											
1892	5256	55.2	00.3	477.16	〃	45733	6046	5512	5559	48.7	− 4.7	5719	32.7	−20.7
1894	5257	55.9	02.3	519.56	〃	44293	6033	5451	5569	46.4	−11.8	5729	30.4	−27.8
1896	5258	55.8	04.8	535.11	〃	43653	6017	5418	5567	45.0	−14.9	5727	29.0	−30.9
〃	5261	〃	〃	〃	〃	43671	6018	5420	〃	45.1	−14.7	〃	29.1	−30.7
1898	4916	56.1	07.2	536.88	II 21	44409	6098	5497	5571	52.7	− 7.4	5731	36.7	−23.4

* G.S.I. Gravity Base Station, Faculty of Science, Kumamoto University.

Table XII. (Continued)

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	131°′											
1899	5259	56.0	08.6	545.01	V 27	44924	6174	5564	5570	60.4	− 0.6	5730	44.4	−16.6
1902	5260	57.2	11.7	744.71	〃	41169	6415	5582	5586	82.9	− 0.4	5746	66.9	−16.4
1905	4917	57.4	14.8	625.58	II 21	43322	6263	5563	5589	67.4	− 2.6	5749	51.4	−18.6

Synoptic Results for Kumamoto Prefecture (III).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	131°′											
1 *	5263	55.5	04.6	574.92	V 28	42626	6037	5394	5563	47.4	−16.9	5723	31.4	−32.9
2 *	5264.1	55.2	03.9	629.42	〃	41373	6080	5375	5559	52.1	−18.4	5719	36.1	−34.4
5 *	5265	54.6	05.0	760.77	〃	38303	6178	5327	5551	62.7	−22.4	5711	46.7	−38.4
7 *	5266.1	54.4	03.9	880.33	〃	35618	6279	5293	5548	73.1	−25.5	5708	57.1	−41.5
10 *	5267	53.4	03.1	1042.08	〃	32123	6428	5262	5534	89.4	−27.2	5694	73.4	−43.2
13 *	5268	52.9	03.9	1104.53	〃	30907	6499	5263	5527	97.2	−26.4	5687	81.2	−42.4
14 *	5269.1	52.6	04.7	1167.18	〃	29635	6565	5259	5523	104.2	−26.4	5683	88.2	−42.4
15 *	5270	52.5	05.2	1240.69	〃	28076	6636	5248	5522	111.4	−27.4	5682	95.4	−43.4

*Kyôto University Bench Marks.

Synoptic Results for Kumamoto Prefecture (IV).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130°′											
2707	5228	46.8	42.7	10.27	V 26	55968	5629	5617	5444	18.5	17.3	5604	2.5	1.3
2705	5229	45.0	43.7	4.63	〃	55950	5609	5604	5419	19.0	18.5	5579	3.0	2.5
2703	5230	43.9	45.2	8.51	〃	56551	5681	5672	5404	27.7	26.8	5564	11.7	10.8
2701	5231	43.1	47.3	15.80	〃	56446	5693	5676	5393	30.0	28.3	5553	14.0	12.3
2699	5232	41.9	48.8	26.99	〃	56259	5709	5679	5377	33.2	30.2	5537	17.2	14.2
2697	5233.1	42.3	50.4	67.27	〃	55264	5734	5659	5382	35.2	27.7	5542	19.2	11.7
2695	5234	43.3	52.2	227.54	〃	52063	5909	5654	5396	51.3	25.8	5556	35.3	9.8
2693	5235.1	44.0	53.9	341.53	〃	49736	6028	5645	5405	62.3	24.0	5566	46.2	7.9
2691	5236	43.9	56.1	485.07	〃	46770	6174	5631	5404	77.0	22.7	5564	61.0	6.7
2689	5237	43.1	58.1	518.08	〃	45863	6185	5605	5393	79.2	21.2	5553	63.2	5.2
2687	5238	41.4	59.0	461.17	〃	46590	6082	5566	5370	71.2	19.6	5530	55.2	3.6
			131°											
2685	5239	41.0	00.6	456.65	〃	46056	6015	5504	5364	65.1	14.0	5525	49.0	− 2.1
2683	5240	40.5	02.3	423.56	〃	46358	5943	5469	5357	58.6	11.2	5518	42.5	− 4.9
〃	5246.1	〃	〃	〃	V 27	46356	5943	5469	〃	58.6	11.2	〃	42.5	− 4.9
2681	5242.1	40.2	04.5	466.77	〃	44662	5907	5384	5353	55.4	3.1	5514	39.3	−13.0
2679	5243	40.7	06.6	531.38	〃	43132	5953	5358	5360	59.3	−0.2	5521	43.2	−16.3
2676	5244	40.7	09.5	532.54	〃	43386	5982	5386	5360	62.2	2.6	5521	46.1	−13.5

Synoptic Results for Kumamoto Prefecture (V).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130° ′											
2863	5205	16.8	32.4	38.59	V 25	52356	5355	5312	5034	32.1	27.8	5195	16.0	11.7
2861	5206	17.6	34.4	116.39	〃	50760	5435	5305	5045	39.0	26.0	5206	22.9	9.9
2859	5207	17.2	36.2	62.71	〃	51599	5353	5283	5040	31.3	24.3	5201	15.2	8.2
2856	5208.1	15.6	37.6	71.13	〃	50735	5293	5213	5018	27.5	19.5	5179	11.4	3.4
2854	5209	14.8	39.5	83.68	〃	50412	5299	5206	5007	29.2	19.9	5168	13.1	3.8

Table XII. (Continued)

B M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130° ′											
2852	5210	14.3	41.2	93.98	V 25	50013	5291	5186	5000	29.1	18.6	5162	12.9	2.4
2850	5211	13.3	43.3	103.41	〃	48774	5197	5081	4987	21.0	9.4	5148	4.9	− 6.7
2848	5212	12.6	45.6	104.17	〃	47908	5112	4996	4977	13.5	1.9	5139	− 2.7	−14.3
〃	5222	〃	〃	〃	〃	47891	5111	4994	〃	13.4	1.7	〃	− 2.8	−14.5
2847	5213	11.8	46.2	128.93	〃	47467	5145	5000	4966	17.9	3.4	5128	1.7	−12.8
2845	5214	11.6	48.6	124.89	〃	47319	5117	4978	4964	15.3	1.4	5125	− 0.8	−14.7
2843	5215	11.9	51.2	158.06	〃	46447	5133	4956	4968	16.5	− 1.2	5129	0.4	−17.3
2841	5216	13.4	52.9	144.48	〃	47037	5150	4988	4988	16.2	0.0	5149	0.1	−16.1
2839	5217	14.6	55.0	154.90	〃	46295	5108	4934	5004	10.4	− 7.0	5166	− 5.8	−23.2
2836	5218	16.4	58.0	179.89	〃	46056	5161	4959	5029	13.2	− 7.0	5190	− 2.9	−23.1
			131°											
2834	5219.$_1$	16.3	00.3	212.05	〃	45865	5241	5004	5027	21.4	− 2.3	5189	5.2	−18.5
〃	5221.$_1$	〃	〃	〃	〃	45867	5241	5004	〃	21.4	− 2.3	〃	5.2	−18.5

Synoptic Results for Kumamoto Prefecture (VI).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	130° ′											
4307	5281	32.4	11.3	4.29	V 29	57741	5787	5783	5247	54.0	53.6	5407	38.0	37.6
4309	5280	30.9	11.7	2.44	〃	57435	5751	5748	5226	52.5	52.2	5387	36.4	36.1
4311	5279	29.2	11.7	3.34	〃	57079	5718	5715	5203	51.5	51.2	5364	35.4	35.1
4313	5278	27.5	11.2	4.52	〃	57566	5771	5765	5180	59.1	58.5	5341	43.0	42.4
〃	5296	〃	〃	〃	V 30	57562	5770	5765	〃	59.0	58.5	〃	42.9	42.4
4315	5282	26.0	10.6	25.08	V 29	57094	5787	5759	5159	62.8	60.0	5320	46.7	43.9
4317	5283.$_1$	25.8	08.3	82.03	〃	55557	5809	5717	5157	65.2	56.0	5318	49.1	39.9
〃	5295	〃	〃	〃	V 30	55545	5808	5716	〃	65.1	55.9	〃	49.0	39.8
4318	5285	25.0	07.9	138.98	〃	54338	5863	5707	5146	71.7	56.1	5307	55.6	40.0
4320	5286	23.6	07.8	135.58	〃	54506	5869	5717	5127	74.2	59.0	5288	58.1	42.9

4322	5287	21.9	08.0	146.60	"	54067	5859	5695	5104	75.5	59.1	5265	59.4	43.0
4324	5288	20.4	07.5	62.57	"	55541	5747	5677	5083	66.4	59.4	5244	50.3	43.3
4327	5289.$_1$	18.8	05.5	5.80	"	56342	5652	5646	5061	59.1	58.5	5223	42.9	42.3
4328	5291	18.1	04.8	1.89	"	56351	5641	5639	5052	58.9	58.7	5213	42.8	42.6
4330	5292	16.8	04.2	5.90	"	55929	5611	5605	5034	57.7	57.1	5195	41.6	41.0
4332	5293	15.6	04.1	52.89	"	54617	5625	5566	5018	60.7	54.8	5179	44.6	38.7
4334	5294	14.7	05.7	23.63	"	55441	5617	5591	5006	61.1	58.5	5167	45.0	42.4

(43) Ôita Prefecture.

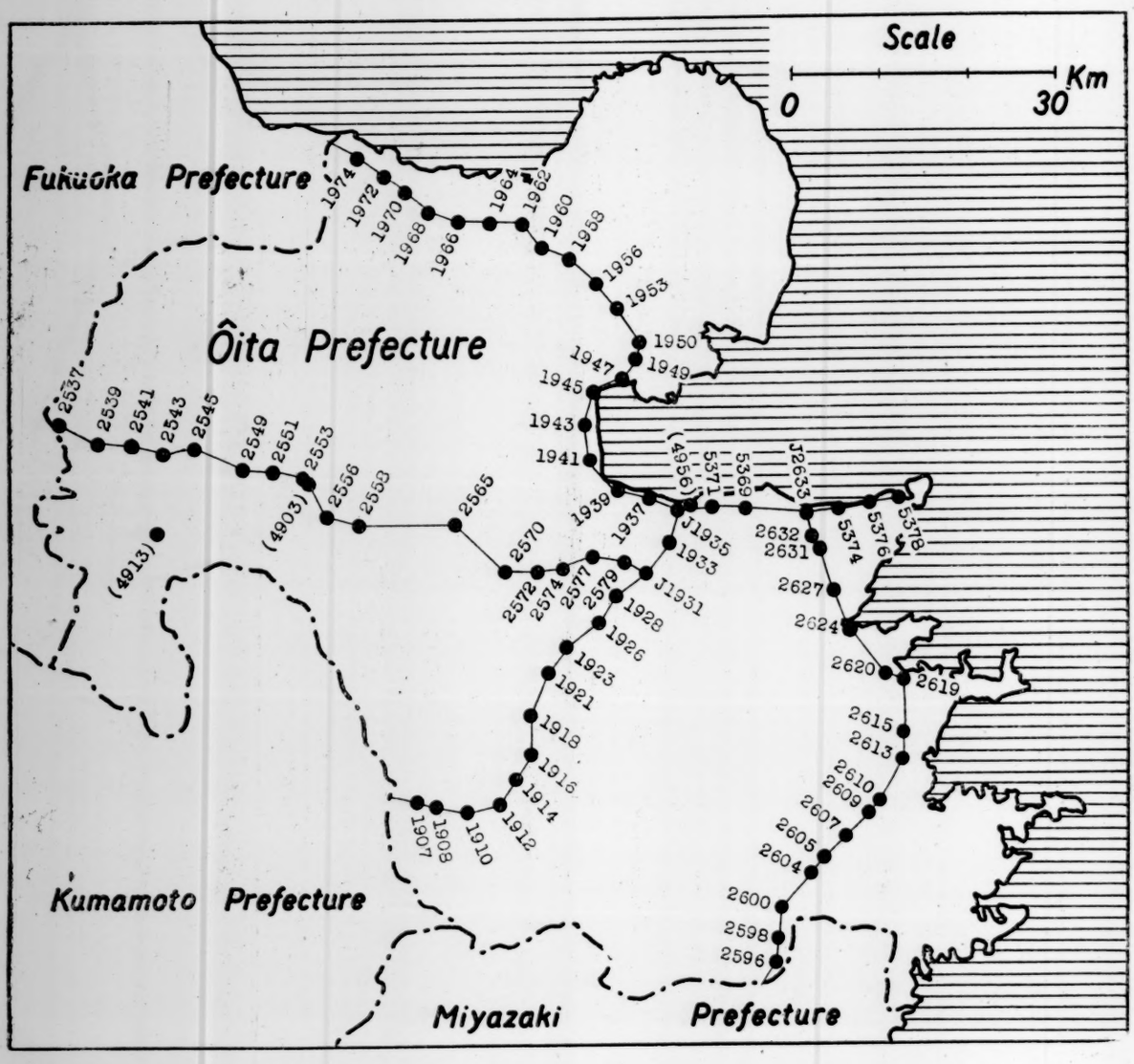

Fig. 11. Gravity Stations in Ôita Prefecture.

Table XIII. Synoptic Results for Ôita Prefecture (I).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	131°′											
5378	4937	15.0	51.8	22.38	II 22	60541	6123	6098	5832	29.1	26.6	5991	13.2	10.7
5376	4936	14.6	49.8	10.30	〃	60778	6110	6098	5826	28.4	27.2	5985	12.5	11.3
5374	4935	14.2	47.2	6.67	〃	60035	6024	6017	5821	20.3	19.6	5980	4.4	3.7
J. 2633	4933	13.9	44.8	2.71	〃	58766	5885	5882	5816	6.9	6.6	5976	− 9.1	− 9.4
5369	4868	14.3	41.5	3.38	II 18	56611	5672	5668	5822	−15.0	−15.4	5981	−30.9	−31.3
5371	4867	14.4	38.9	3.57	〃	55542	5565	5561	5823	−25.8	−26.2	5983	−41.8	−42.2
Ôita W. S. *	4956	14.0	37.3	4.60	II 23	55295	5544	5539	5818	−27.4	−27.9	5977	−43.3	−43.8
J. 1935	4865	14.1	36.3	4.32	II 18	55193	5533	5528	5819	−28.6	−29.1	5979	−44.6	−45.1
1937	4869	14.9	34.0	4.66	〃	55120	5526	5521	5830	−30.4	−30.9	5990	−46.4	−46.9
1939	4870	15.7	31.5	6.73	〃	56296	5650	5643	5841	−19.1	−19.8	6001	−35.1	−35.8
1941	4871	16.8	30.2	14.68	〃	56670	5712	5696	5856	−14.4	−16.0	6016	−30.4	−32.0
〃	4891	〃	〃	〃	II 19	56675	5713	5696	〃	−14.3	−16.0	〃	−30.3	−32.0
1943	4873	18.9	29.7	22.12	〃	56981	5766	5742	5885	−11.9	−14.3	6045	−27.9	−30.3
1945	4874	21.0	30.0	14.62	〃	58069	5852	5836	5914	− 6.2	− 7.8	6074	−22.2	−23.8
1947	4875	21.9	31.8	26.49	〃	58019	5884	5854	5927	− 4.3	− 7.3	6086	−20.2	−23.2
1949	4876	23.4	33.0	101.27	〃	57169	6029	5916	5948	8.1	− 3.2	6107	− 7.8	−19.1
1950	4877	24.1	33.0	71.44	〃	58182	6039	5959	5957	8.2	0.2	6116	− 7.7	−15.7
1953	4878	26.0	31.3	74.91	〃	59719	6203	6119	5984	21.9	13.5	6143	6.0	− 2.4
〃	4890	〃	〃	〃	〃	59708	6202	6118	〃	21.8	13.4	〃	5.9	− 2.5
1956	4879	28.2	29.8	100.73	〃	60217	6333	6220	6014	31.9	20.6	6173	16.0	4.7
1958	4880	29.2	27.8	144.87	〃	59802	6427	6265	6028	39.9	23.7	6187	24.0	7.8
1960	4881	30.0	25.8	47.27	〃	61943	6340	6287	6039	30.1	24.8	6198	14.2	8.9
1962	4882	31.5	24.5	20.68	〃	63260	6390	6367	6060	33.0	30.7	6219	17.1	14.8
1964	4883	31.3	22.7	11.15	〃	63139	6348	6336	6057	29.1	27.9	6216	13.2	12.0
1966	4884	31.5	20.3	15.51	〃	63035	6351	6334	6060	29.1	27.4	6219	13.2	11.5
1968	4885	32.1	18.0	18.85	〃	63360	6394	6373	6068	32.6	30.5	6227	16.7	14.6
1970	4886	33.3	16.2	12.47	〃	63957	6434	6420	6085	34.9	33.5	6244	19.0	17.6
1972	4887	34.5	14.4	16.80	〃	64317	6484	6465	6101	38.3	36.4	6260	22.4	20.5
1974	4888	35.6	12.4	3.45	〃	64997	6510	6506	6117	39.3	38.9	6275	23.5	23.1

* Weather Station Bench Mark.

Synoptic Results for Ôita Prefecture (II).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1951	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	131°′											
2632	4938	13.1	45.3	9.97	II 22	60068	6038	6026	5805	23.3	22.1	5965	7.3	6.1
2631	4939	12.2	45.8	20.43	〃	59565	6020	5997	5793	22.7	20.4	5952	6.8	4.5
2627	4940	09.6	47.2	24.07	〃	60028	6077	6050	5757	32.0	29.3	5917	16.0	13.3
2624	4941	07.0	48.2	3.33	〃	58719	5882	5879	5721	16.1	15.8	5881	0.1	− 0.2
2620	4942	04.5	50.9	6.60	〃	57237	5744	5737	5687	5.7	5.0	5847	−10.3	−11.0
2619	4943	04.2	51.8	3.15	〃	57229	5733	5729	5683	5.0	4.6	5842	−10.9	−11.3
2615	4955	01.2	51.9	94.79	II 23	54216	5714	5608	5641	7.3	− 3.3	5801	− 8.7	−19.3
		32°												
2613	4954	59.2	51.9	23.67	〃	55249	5598	5571	5614	− 1.6	− 4.3	5774	−17.6	−20.3
2610	4952	57.1	50.7	6.74	II 22	54891	5510	5502	5585	− 7.5	− 8.3	5745	−23.5	−24.3
2609	4951	56.2	49.9	13.40	〃	54426	5484	5469	5573	− 8.9	−10.4	5733	−24.9	−26.4
2607	4944	55.0	48.1	35.83	〃	53607	5471	5431	5556	− 8.5	−12.5	5716	−24.5	−28.5
2605	4945	53.5	46.7	63.24	〃	52578	5453	5382	5536	− 8.3	−15.4	5696	−24.3	−31.4
2604	4946	53.0	45.8	75.21	〃	52184	5451	5366	5529	− 7.8	−16.3	5689	−23.8	−32.3
2600	4947	50.3	43.2	218.86	〃	48856	5561	5316	5492	6.9	−17.6	5652	− 9.1	−33.6
2598	4948	48.9	43.1	164.17	〃	49399	5447	5263	5472	− 2.5	−20.9	5633	−18.6	−37.0
2596	4949	47.3	43.0	114.06	〃	50120	5364	5236	5450	− 8.6	−21.4	5611	−24.7	−37.5

Synoptic Results for Ôita Prefecture (III).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1951	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	131°′											
1933	4894	12.2	35.3	10.59	II 20	55975	5630	5618	5793	−16.3	−17.5	5952	−32.2	−33.4
J. 1931	4930	10.6	33.7	33.18	II 21	57105	5813	5776	5771	4.2	0.5	5930	−11.7	−15.4
1928	4929	09.1	31.2	103.39	〃	55645	5902	5780	5750	15.2	3.0	5910	− 0.8	−13.0
1926	4928	07.4	29.9	199.36	〃	53847	6000	5777	5727	27.3	5.0	5886	11.4	−10.9
1923	4926	05.7	27.5	357.72	〃	50121	6116	5716	5703	41.3	1.3	5863	25.3	−14.7

1921	4925	04.2	26.0	539.28	〃	46213	6286	5682	5683	60.3	− 0.1	5842	44.4	−16.0
1918	4924	01.8	25.8	387.46	〃	49669	6163	5729	5650	51.3	7.9	5809	35.4	− 8.0
1916	4923	00.1	25.8	221.00	〃	52734	5955	5708	5626	32.9	8.2	5786	16.9	− 7.8
		32°												
1914	4922	58.6	24.4	227.52	〃	52450	5947	5693	5606	34.1	8.7	5766	18.1	− 7.3
1912	4921	57.2	23.0	258.09	〃	50851	5882	5593	5586	29.6	0.7	5746	13.6	−15.3
1910	4920	56.8	20.8	355.18	〃	48725	5969	5571	5581	38.8	− 1.0	5741	22.8	−17.0
1908	4919	57.0	18.6	488.28	〃	45712	6078	5532	5584	49.4	− 5.2	5744	33.4	−21.2
1907	4918	57.2	17.3	537.88	〃	44838	6144	5542	5586	55.8	− 4.4	5746	39.8	−20.4

Synoptic Results for Ôita Prefecture (IV).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	Helmert Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		33° ′	131°′											
2579	4895	11.2	32.2	27.33	II 20	56024	5687	5656	5779	− 9.2	−12.3	5939	−25.2	−28.3
2577	4896	11.6	30.1	65.98	〃	55780	5785	5710	5785	0.0	− 7.5	5944	−15.9	−23.4
2574	4897	10.9	27.8	106.78	〃	53216	5651	5532	5775	−12.4	−24.3	5935	−28.4	−40.3
2572	4898	11.0	25.7	157.77	〃	51601	5647	5471	5776	−12.9	−30.5	5936	−28.9	−46.5
2570	4899	10.9	23.4	221.93	〃	50762	5761	5513	5775	− 1.4	−26.2	5935	−17.4	−42.2
2565	4900	13.5	19.7	429.63	〃	47592	6085	5604	5811	27.4	−20.7	5970	11.5	−36.6
2558	4901	13.4	12.8	435.44	〃	46786	6022	5535	5809	21.3	−27.4	5969	5.3	−43.4
2556	4902	14.1	10.7	389.89	〃	49069	6110	5674	5819	29.1	−14.5	5979	13.1	−30.5
2553	4904	16.5	09.1	329.74	〃	51465	6164	5795	5852	31.2	− 5.7	6012	15.2	−21.7
2551	4905	16.6	06.6	314.72	〃	51916	6163	5811	5854	30.9	− 4.3	6013	15.0	−20.2
2549	4906	17.1	04.3	405.16	〃	50635	6314	5860	5861	45.3	− 0.1	6020	29.4	−16.0
2545	4907	18.4	00.7	285.42	〃	53733	6254	5935	5878	37.6	5.7	6038	21.6	−10.3
			130°											
2543	4908	18.3	58.7	143.59	〃	56722	6115	5955	5877	23.8	7.8	6036	7.9	− 8.1
2541	4909	18.8	56.4	85.49	〃	57688	6033	5937	5884	14.9	5.3	6043	− 1.0	−10.6
2539	4911	18.6	54.4	77.41	II 21	57815	6020	5934	5881	13.9	5.3	6041	− 2.1	−10.7
2537	4912	18.8	52.1	62.84	〃	58177	6012	5941	5884	12.8	5.7	6043	− 3.1	−10.2

(44) **Miyazaki Prefecture.**

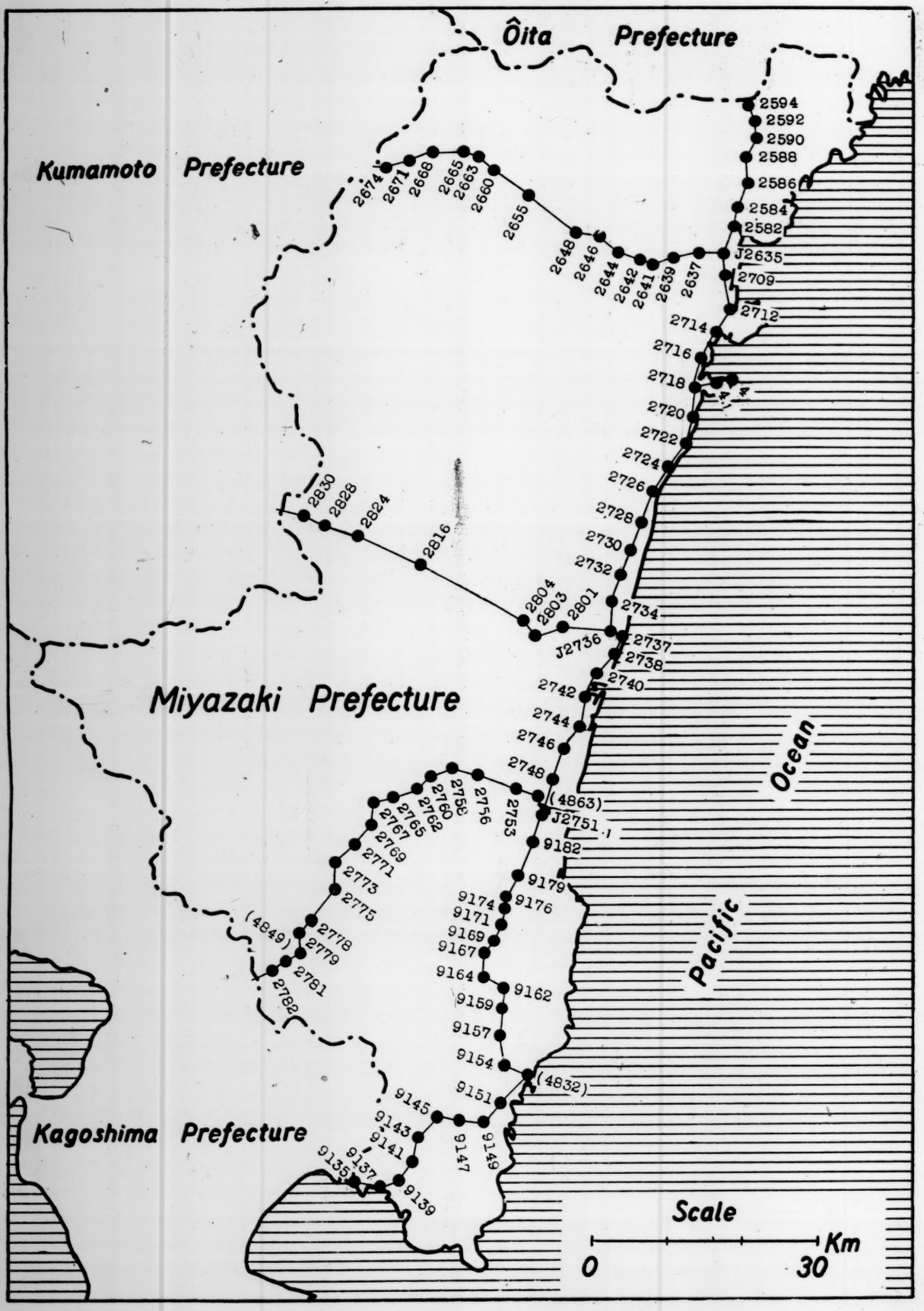

Fig. 12. Gravity Stations in Miyazaki Prefecture.

Table XIV. Synoptic Results for Miyazaki Prefecture (I).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	131°′											
2594	4804	46.0	42.0	72.97	II 13	50234	5249	5167	5433	−18.4	−26.6	5593	−34.4	−42.6
2592	4803	44.4	42.7	36.31	〃	51055	5218	5177	5411	−19.3	−23.4	5571	−35.3	−39.4
2590	4802	43.1	43.0	59.88	〃	50600	5245	5178	5393	−14.8	−21.5	5553	−30.8	−37.5
2588	4801	41.6	42.0	17.98	〃	50988	5154	5134	5372	−21.8	−23.8	5533	−37.9	−39.9
2586	4800	39.9	42.4	35.98	〃	50745	5186	5145	5349	−16.3	−20.4	5510	−32.4	−36.5
2584	4799	38.4	41.5	6.01	〃	51189	5137	5131	5329	−19.2	−19.8	5489	−35.2	−35.8
2582	4798	36.8	41.2	39.56	〃	50509	5173	5129	5307	−13.4	−17.8	5467	−29.4	−33.8
J. 2635	4797	34.6	40.2	5.69	〃	51026	5120	5114	5277	−15.7	−16.3	5437	−31.7	−32.3
2709	4777	32.7	40.7	4.10	II 11	50981	5111	5106	5251	−14.0	−14.5	5412	−30.1	−30.6
2712	4776	30.2	40.5	2.32	〃	50914	5099	5096	5217	−11.8	−12.1	5377	−27.8	−28.1
2714	4775	28.5	39.4	4.37	〃	50755	5089	5084	5194	−10.5	−11.0	5354	−26.5	−27.0
2716	4774	26.6	38.1	2.36	〃	50713	5079	5076	5168	− 8.9	− 9.2	5329	−25.0	−25.3
4 *	4773	25.5	40.4	2.53	〃	50545	5062	5060	5153	− 9.1	− 9.3	5314	−25.2	−25.4
$4_{.1}$ *	4772	25.2	39.5	1.63	〃	50482	5053	5051	5149	− 9.6	− 9.8	5310	−25.7	−25.9
2718	4771	24.6	37.7	6.35	〃	50388	5058	5051	5140	− 8.2	− 8.9	5301	−24.3	−25.0
2720	4770	22.4	38.0	18.55	〃	49815	5039	5018	5110	− 7.1	− 9.2	5271	−23.2	−25.3
2722	4769	20.6	37.4	47.58	〃	48932	5040	4987	5086	− 4.6	− 9.9	5247	−20.7	−26.0
2724	4768	19.0	35.8	36.04	〃	48591	4970	4930	5054	− 9.4	−13.4	5225	−25.5	−29.5
2726	4767	17.2	34.5	21.46	〃	48584	4925	4901	5040	−11.5	−13.9	5201	−27.6	−30.0
2728	4766	15.0	33.5	29.82	〃	47940	4886	4853	5010	−12.4	−15.7	5171	−28.5	−31.8
2730	4765	13.0	32.5	54.80	〃	46747	4844	4783	4983	−13.9	−20.0	5144	−30.0	−36.1
2732	4764	11.0	31.6	24.74	〃	46375	4714	4686	4955	−24.1	−26.9	5117	−40.3	−43.1
2734	4763	09.0	30.9	46.46	〃	45136	4657	4605	4928	−27.1	−32.3	5090	−43.3	−48.5
J. 2736	4762	07.2	30.6	4.40	〃	45290	4543	4538	4904	−36.1	−36.6	5065	−52.2	−52.7
2737	4761	06.7	31.7	10.50	〃	44276	4460	4448	4897	−43.7	−44.9	5059	−59.9	−61.1

* Tide Gauge Station Bench Marks.

Table XIV. (Continued)

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		32° ′	131°′											
2738	4760	05.8	31.2	11.11	II 11	43856	4420	4408	4885	−46.5	−47.7	5047	−62.7	−63.9
2740	4759	04.0	29.8	5.62	〃	43585	4376	4370	4851	−48.5	−49.1	5022	−64.6	−65.2
2742	4758	02.2	28.8	3.09	〃	43108	4320	4317	4836	−51.6	−51.9	4998	−67.8	−68.1
2744	4757	00.2	28.4	9.37	〃	42347	4264	4253	4809	−54.5	−55.6	4971	−70.7	−71.8
		31°												
2746	4756	58.6	27.0	12.13	〃	42732	4311	4297	4788	−47.7	−49.1	4949	−63.8	−65.2
2748	4755	56.7	26.1	7.94	〃	43397	4364	4355	4762	−39.8	−40.7	4924	−56.0	−56.9
Miyazaki W.S. *	4863	55.2	25.0	7.58	II 17	43879	4411	4403	4742	−33.1	−33.9	4903	−49.2	−50.0
J. 2751.1	4754	54.0	25.2	6.17	II 11	43729	4392	4385	4725	−33.3	−34.0	4887	−49.5	−50.2
9182	4819	52.3	24.5	13.10	II 15	43667	4407	4392	4703	−29.6	−31.1	4864	−45.7	−47.2
9179	4820	49.7	23.6	48.90	〃	43247	4476	4421	4667	−19.1	−24.6	4829	−35.3	−40.8
9176	4821	48.2	22.6	159.31	〃	41229	4615	4436	4647	− 3.2	−21.1	4809	−19.4	−37.3
9174	4822	47.1	22.0	269.30	〃	39151	4746	4445	4632	11.4	−18.7	4794	− 4.8	−34.9
9171	4823	45.9	21.8	318.94	〃	38134	4798	4441	4616	18.2	−17.5	4778	2.0	−33.7
9169	4824	44.7	21.3	297.23	〃	38741	4791	4459	4600	19.1	−14.1	4762	2.9	−30.3
9167	4825	43.9	20.6	228.78	〃	40222	4728	4472	4589	13.9	−11.7	4751	− 2.3	−27.9
9164	4826	42.1	20.4	102.54	〃	42787	4595	4480	4565	3.0	− 8.5	4727	−13.2	−24.7
9162	4827	41.3	22.0	97.85	〃	42323	4534	4425	4554	− 2.0	−12.9	4717	−18.3	−29.2
9159	4828	39.4	22.3	31.45	〃	43643	4461	4426	4529	− 6.8	−10.3	4691	−23.0	−26.5
9157	4829	37.8	22.5	36.02	〃	43820	4493	4453	4507	− 1.4	− 5.4	4670	−17.7	−21.7
9154	4830	35.9	22.7	6.39	〃	44458	4466	4458	4482	− 1.6	− 2.4	4644	−17.8	−18.6
Aburatsu W.S. **	4832	35.2	24.2	3.10	II 16	44138	4423	4420	4472	− 4.9	− 5.2	4635	−21.2	−21.5
9151	4833	33.2	22.3	2.40	〃	44615	4469	4466	4445	2.4	2.1	4608	−13.9	−14.2
9149	4834	31.8	20.7	8.05	〃	44631	4488	4479	4427	6.1	5.2	4589	−10.1	−11.0
9147	4835	31.8	19.0	41.64	〃	44321	4561	4514	4427	13.4	8.7	4589	− 2.8	− 7.5
9145	4836	32.1	17.1	92.73	〃	43644	4651	4547	4431	22.0	11.6	4593	5.8	− 4.6

* Weather Station Barometer Room.

** Weather Station, concrete floor of the entrance porch.

9143	4837	31.1	15.5	34.48	〃	44841	4591	4552	4417	17.4	13.5	4580	1.1	− 2.8
9141	4838	29.3	15.0	27.67	〃	44930	4578	4547	4393	18.5	15.4	4556	2.2	− 0.9
9139	4839	27.8	13.9	10.30	〃	45323	4564	4553	4373	19.1	18.0	4536	2.8	1.7
9137	4840	27.2	12.2	6.83	〃	45703	4591	4584	4365	22.6	21.9	4528	6.3	5.6
9135	4841	27.3	10.2	7.89	〃	46145	4639	4630	4366	27.3	26.4	4529	11.0	10.1

Synoptic Results for Miyazaki Prefecture (II).

B.M.	No.	φ	λ	H	Date	g	g_0	g_0''	HELMERT Formula of 1901			International Formula		
				(m)	1954	979.	979.	979.	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)	γ_0 979.	Δg_0 (mgal.)	$\Delta g_0''$ (mgal.)
		32° ′	131°′											
2637	4780	34.8	38.2	7.88	II 12	50826	5107	5098	5280	−17.3	−18.2	5440	−33.3	−34.2
2639	4781	34.5	36.0	18.95	〃	50536	5112	5091	5275	−16.3	−18.4	5436	−32.4	−34.5
2641	4782	33.7	34.1	16.32	〃	50370	5087	5069	5264	−17.7	−19.5	5425	−33.8	−35.6
2642	4783	34.3	33.2	66.68	〃	49369	5143	5068	5273	−13.0	−20.5	5433	−29.0	−36.5
2644	4784	34.6	31.2	92.17	〃	48940	5178	5075	5277	− 9.9	−20.2	5437	−25.9	−36.2
2646	4785	35.9	29.8	41.94	〃	49542	5084	5037	5295	−21.1	−25.8	5455	−37.1	−41.8
2648	4786	36.2	28.1	56.39	〃	49449	5119	5056	5299	−18.0	−24.3	5459	−34.0	−40.3
2655	4787	38.8	23.7	151.95	〃	48154	5284	5114	5334	− 5.0	−22.0	5495	−21.1	−38.1
2660	4788	41.0	21.1	280.35	〃	46690	5534	5221	5364	17.0	−14.3	5525	0.9	−30.4
2663	4789	42.0	19.5	224.14	〃	48113	5503	5252	5378	12.5	−12.6	5538	− 3.5	−28.6
2665	4790	42.0	18.2	264.20	〃	47418	5557	5262	5378	17.9	−11.6	5538	1.9	−27.6
〃	4795	〃	〃	〃	〃	47423	5558	5262	〃	18.0	−11.6	〃	2.0	−27.6
2668	4791	42.1	16.3	413.11	〃	44986	5774	5311	5379	39.5	− 6.8	5540	23.4	−22.9
2671	4794	41.6	13.5	679.45	〃	40490	6146	5386	5372	77.4	1.4	5533	61.3	−14.7
2674	4792	40.6	11.5	515.96	〃	44046	5997	5420	5359	63.8	6.1	5519	47.8	− 9.9

Synoptic Results for Miyazaki Prefecture (III).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		32° ′	131°′											
2801	4809	07.0	26.7	117.76	II 14	44032	4767	4635	4901	−13.4	−26.6	5063	−29.6	−42.8
2803	4807	06.5	24.5	13.71	II 13	46627	4705	4690	4894	−18.9	−20.4	5056	−35.1	−36.6
〃	4816	〃	〃	〃	II 14	46639	4706	4691	〃	−18.8	−20.3	〃	−35.0	−36.5
2804	4810	07.6	23.8	16.45	〃	47418	4793	4774	4909	−11.6	−13.5	5071	−27.8	−29.7
2816	4811	11.6	14.7	191.44	〃	44366	5027	4813	4964	6.3	−15.1	5125	− 9.8	−31.2
2824	4812	13.5	09.5	280.35	〃	43073	5173	4859	4989	18.4	−13.0	5151	2.2	−29.2
2828	4813	14.7	06.4	351.64	〃	41851	5270	4877	5006	26.4	−12.9	5167	10.3	−29.0
2830	4814	15.5	04.4	512.51	〃	39022	5484	4910	5017	46.7	−10.7	5178	30.6	−26.8

Synoptic Results for Miyazaki Prefecture (IV).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		31° ′	131°′											
2753	4862	55.5	23.0	8.30	II 17	45033	4529	4520	4746	−21.7	−22.6	4908	−37.9	−38.8
2756	4861	56.4	19.8	16.74	〃	46523	4704	4685	4758	− 5.4	− 7.3	4920	−21.6	−23.5
2758	4860	57.0	17.7	14.76	〃	47596	4805	4789	4766	3.9	2.3	4928	−12.3	−13.9
2760	4859	56.6	15.9	20.31	〃	47580	4821	4798	4761	6.0	3.7	4922	−10.1	−12.4
2762	4858.$_1$	55.8	14.5	36.01	〃	47521	4863	4823	4750	11.3	7.3	4912	− 4.9	− 8.9
2765	4857	55.1	12.9	113.30	〃	46358	4985	4859	4740	24.5	11.9	4902	8.3	− 4.3
2767	4856	54.7	11.4	147.57	〃	45910	5046	4881	4735	31.1	14.6	4897	14.9	− 1.6
2769	4855	53.0	10.9	170.32	〃	45056	5031	4841	4712	31.9	12.9	4874	15.7	− 3.3
2771	4854	51.6	09.5	175.95	〃	44721	5015	4818	4693	32.2	12.5	4855	16.0	− 3.7
2773	4853	50.2	07.9	131.10	〃	45475	4952	4805	4674	27.8	13.1	4836	11.6	− 3.1
2775	4852	48.2	07.8	136.07	〃	45047	4925	4772	4647	27.8	12.5	4809	11.6	− 3.7
2778	4851	46.0	05.9	144.24	〃	44498	4895	4734	4618	27.7	11.6	4780	11.5	− 4.6
2779	4850	45.2	05.1	142.58	〃	44421	4882	4723	4607	27.5	11.6	4769	11.3	− 4.6
Miyakonojô W.S. *	4849	43.6	05.1	154.20	〃	44017	4878	4705	4585	29.3	12.0	4747	13.1	− 4.2
2781	4847	43.4	04.1	144.10	II 16	44331	4878	4717	4582	29.6	13.5	4745	13.3	− 2.8

* Weather Station, entrance.

2782	4846	42.5	03.2	143.11	"	44512	4893	4733	4570	32.3	16.3	4733	16.0	0.0

(45) Kagoshima Prefecture.

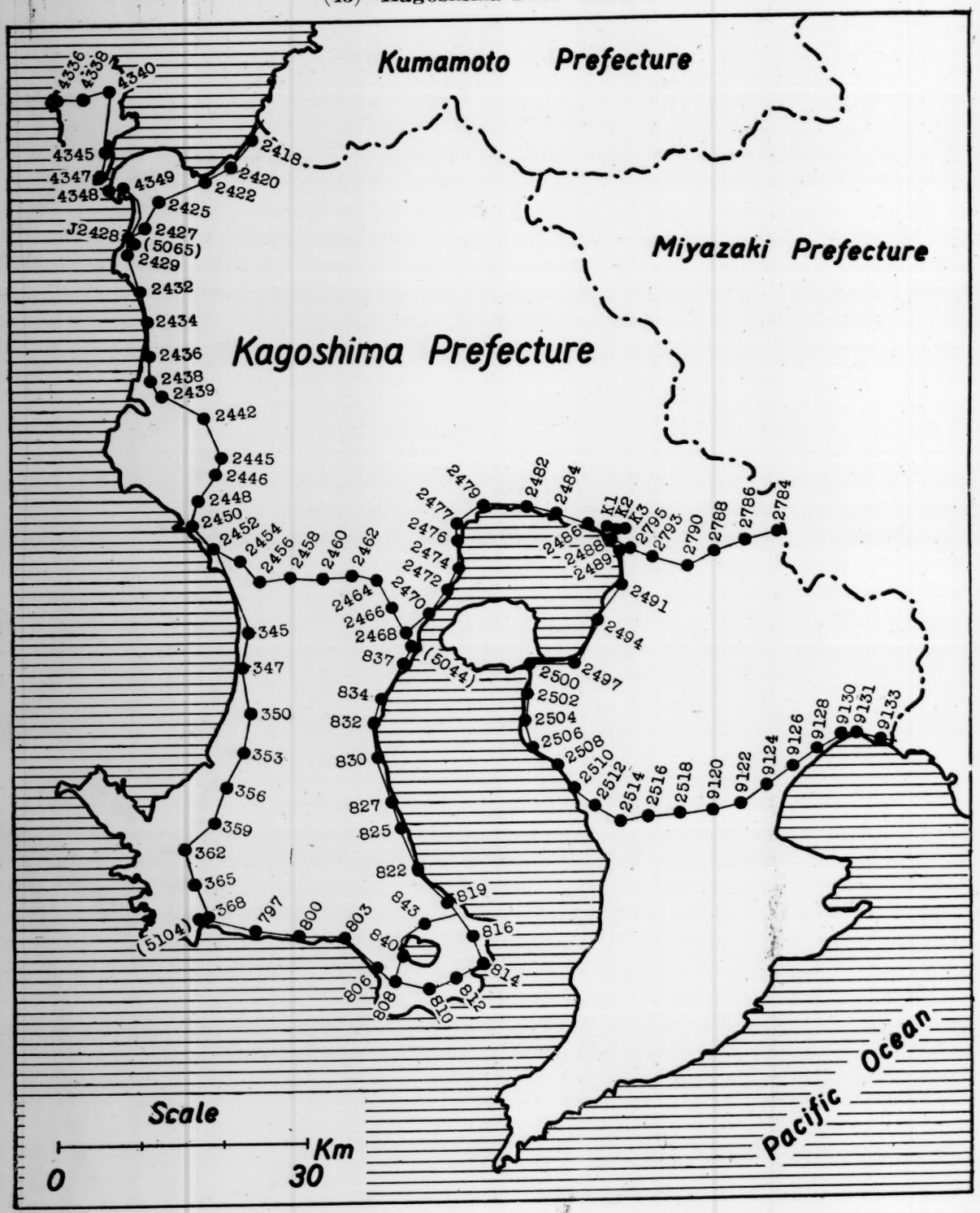

Fig. 13. Gravity Stations in Kagoshima Prefecture.

Table XV. Synoptic Results for Kagoshima Prefecture (I).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	Helmert Formula of 1901 γ_0 979.	Helmert Formula of 1901 Δg_0 (mgal.)	Helmert Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		32° ′	130°′											
4336	5073	10.9	06.6	59.75	III 31	53933	5578	5511	4954	62.4	55.7	5116	46.2	39.5
4338	5072	11.1	08.8	80.36	〃	53138	5562	5472	4957	60.5	51.5	5118	44.4	35.4
4340	5071	11.6	10.6	94.19	〃	52846	5575	5470	4964	61.1	50.6	5125	45.0	34.5
4345	5070	07.5	10.2	95.56	〃	51409	5436	5329	4908	52.8	42.1	5070	36.6	25.9
4347	5069	06.0	10.3	6.03	〃	53132	5332	5325	4888	44.4	43.7	5049	28.3	27.6
4348	5068	05.2	10.8	3.46	〃	52786	5289	5285	4877	41.2	40.8	5038	25.1	24.7
4349	5075	04.9	11.7	12.15	〃	52250	5263	5249	4873	39.0	37.6	5034	22.9	21.5

Synoptic Results for Kagoshima Prefecture (II).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	Helmert Formula of 1901 γ_0 979.	Helmert Formula of 1901 Δg_0 (mgal.)	Helmert Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		32° ′	130°′											
2418	5079	08.1	21.4	4.80	III 31	52020	5217	5211	4916	30.1	29.5	5078	13.9	13.3
2420	5078	06.5	19.9	3.86	〃	51995	5211	5207	4894	31.7	31.3	5056	15.5	15.1
2422	5077	05.3	17.7	5.00	〃	51930	5208	5203	4878	33.0	32.5	5040	16.8	16.3
2425	5076	03.8	14.3	4.54	〃	52497	5264	5259	4858	40.6	40.1	5020	24.4	23.9
2427	5064	02.2	13.0	27.62	III 30	52129	5298	5267	4836	46.2	43.1	4998	30.0	26.9
J. 2428	5066	01.5	12.0	18.79	〃	52583	5316	5295	4827	48.9	46.8	4988	32.8	30.7
Akune W.S. *	5065	01.4	12.2	37.70	〃	52078	5324	5282	4825	49.9	45.7	4987	33.7	29.5
2429	5063	00.5	12.0	2.58	〃	53148	5323	5320	4813	51.0	50.7	4975	34.8	34.5
		31°												
2432	5062	57.6	12.8	15.26	〃	52623	5309	5292	4774	53.5	51.8	4936	37.3	35.6
2434	5061	55.8	13.3	19.15	〃	52179	5277	5256	4750	52.7	50.6	4912	36.5	34.4

* Weather Station Bench Mark.

Table XV. (Continued)

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		31° ′	130°′											
2436	5060	53.7	13.5	24.76	III 30	51876	5264	5236	4721	54.3	51.5	4883	38.1	35.3
2438	5059	51.7	13.7	3.94	〃	52208	5233	5229	4694	53.9	53.5	4856	37.7	37.3
2439	5058	50.9	14.3	4.33	〃	52173	5231	5226	4684	54.7	54.2	4846	38.5	38.0
2442	5057	49.8	17.6	4.71	〃	50983	5113	5108	4669	44.4	43.9	4831	28.2	27.7
2445	5056	46.8	19.0	13.38	〃	50448	5086	5071	4628	45.8	44.3	4790	29.6	28.1
2446	5055	45.9	18.7	35.08	〃	50635	5172	5133	4616	55.6	51.7	4778	39.4	35.5
2448	5054.1	44.4	17.2	37.98	〃	50740	5191	5149	4596	59.5	55.3	4758	43.3	39.1
2450	5053	42.5	16.8	13.05	〃	50157	5056	5041	4570	48.6	47.1	4733	32.3	30.8
2452	5052	40.7	18.2	4.72	〃	50476	5062	5057	4546	51.6	51.1	4708	35.4	34.9
2454	5051	40.1	20.5	31.71	〃	50130	5111	5075	4538	57.3	53.7	4700	41.1	37.5
〃	5081	〃	〃	〃	III 31	50132	5111	5076	〃	57.3	53.8	〃	41.1	37.6
2456	5050	38.7	22.0	55.85	III 30	49592	5132	5069	4519	61.3	55.0	4682	45.0	38.7
2458	5049	38.9	24.2	85.13	〃	48295	5092	4997	4522	57.0	47.5	4684	40.8	31.3
2460	5048	39.0	26.6	101.97	〃	48008	5116	5001	4523	59.3	47.8	4686	43.0	31.5
2462	5047	39.2	29.0	105.44	〃	47427	5068	4950	4526	54.2	42.4	4688	38.0	26.2
2464	5046	38.9	30.7	26.55	〃	49553	5037	5003	4522	51.5	48.6	4684	35.3	32.4
2466	5045.1	37.2	31.7	13.97	〃	49216	4965	4949	4499	46.6	45.0	4662	30.3	28.7
2468	5043	35.2	32.9	4.40	〃	48651	4879	4874	4472	40.7	40.2	4635	24.4	23.9
2470	5001	36.4	34.6	7.66	III 28	48120	4836	4827	4488	34.8	33.9	4651	18.5	17.6
2472	5002	37.7	36.2	11.28	〃	47944	4829	4817	4506	32.3	31.1	4668	16.1	14.9
2474	5041	39.3	37.2	9.39	III 29	47227	4752	4741	4527	22.5	21.4	4690	6.2	5.1
2476	5040	41.4	37.0	11.69	〃	47223	4758	4745	4556	20.2	18.9	4718	4.0	2.7
2477	5003	42.3	37.2	4.79	III 28	47275	4742	4737	4568	17.4	16.9	4730	1.2	0.7
2479	5004	43.7	38.7	9.53	〃	47109	4740	4730	4587	15.3	14.3	4749	− 0.9	− 1.9
2482	5005	43.6	41.8	15.66	〃	46837	4732	4715	4585	14.7	13.0	4747	− 1.5	− 3.2
2484	5006	43.3	44.2	3.14	〃	47337	4743	4740	4581	16.2	15.9	4743	0.0	− 0.3
2486	5007	42.5	46.5	2.43	〃	47925	4800	4797	4570	23.0	22.7	4733	6.7	6.4
K. 1 *	5037	42.0	48.3	33.65	III 29	48431	4947	4909	4564	38.3	34.5	4726	22.1	18.3
K. 2 *	5038	41.9	49.0	187.70	〃	45650	5144	4934	4562	58.2	37.2	4725	41.9	20.9
K. 3 *	5039	42.0	49.5	222.47	〃	45071	5194	4945	4564	63.0	38.1	4726	46.8	21.9

* Earthquake Research Institute Bench Marks.

2488	5008.1	41.4	48.5	56.89	III 28	47960	4972	4908	4556	41.6	35.2	4718	25.4	19.0
2795	5009	40.7	50.0	254.22	〃	44230	5208	4923	4546	66.2	37.7	4708	50.0	21.5
2793	5010	40.2	51.2	380.74	〃	41688	5344	4918	4539	80.5	37.9	4702	64.2	21.6
2790	5011	39.6	54.4	297.26	〃	42945	5212	4879	4531	68.1	34.8	4694	51.8	18.5
2788	5012	40.8	56.6	292.62	〃	42878	5191	4863	4547	64.4	31.6	4710	48.1	15.3
2786	5013	41.5	58.7	241.83	〃	43514	5098	4827	4557	54.1	27.0	4719	37.9	10.8
2784	5014.1	41.9	131° 01.1	192.24	〃	43883	4982	4767	4562	42.0	20.5	4725	25.7	4.2

Synoptic Results for Kagoshima Prefecture (III).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		31° ′	130°′											
345	5114	35.2	20.7	23.05	IV 2	50106	5082	5056	4472	61.0	58.4	4635	44.7	42.1
347	5113	32.1	20.4	7.29	〃	50462	5069	5061	4431	63.8	63.0	4593	47.6	46.8
350	5111	30.3	21.3	11.56	IV 1	50106	5046	5033	4406	64.0	62.7	4569	47.7	46.4
353	5110	27.4	20.8	7.74	〃	49986	5023	5014	4368	65.5	64.6	4530	49.3	48.4
356	5109	24.8	19.2	7.41	〃	49807	5004	4995	4333	67.1	66.2	4496	50.8	49.9
359	5108	22.6	18.5	21.81	〃	49279	4995	4971	4303	69.2	66.8	4466	52.9	50.5
362	5107	20.5	16.5	75.94	〃	48308	5065	4980	4275	79.0	70.5	4438	62.7	54.2
365	5106	18.4	17.0	11.01	〃	49529	4987	4975	4247	74.0	72.8	4410	57.7	56.5
368	5103	16.2	18.0	9.44	〃	49314	4961	4950	4218	74.3	73.2	4381	58.0	56.9
Makurazaki W.S. *	5104	16.1	17.7	30.3	〃	48917	4985	4951	4216	76.9	73.5	4380	60.5	57.1
797	5102	15.2	21.6	25.68	〃	47532	4832	4804	4204	62.8	60.0	4368	46.4	43.6
800	5101	15.0	24.8	7.03	〃	46377	4659	4652	4202	45.7	45.0	4365	29.4	28.7
803	5100	15.0	28.3	3.07	〃	46752	4685	4681	4202	48.3	47.9	4365	32.0	31.6
806	5099	12.8	30.6	8.98	〃	46386	4666	4656	4172	49.4	48.4	4336	33.0	32.0
808	5097	12.1	32.4	35.79	〃	44788	4589	4549	4163	42.6	38.6	4326	26.3	22.3

* Weather Station, concrete floor of the entrance porch.

B.M. Printed in Gothic type are 2nd order bench marks.

Table XV. (Continued)

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		31° ′	130°′											
810	5096	11.3	34.8	54.56	IV 1	44022	4571	4510	4152	41.9	35.8	4316	25.5	19.4
812	5095	12.1	36.7	75.10	〃	42634	4495	4411	4163	33.2	24.8	4326	16.9	8.5
814	5094	13.0	38.8	38.19	〃	43384	4456	4414	4175	28.1	23.9	4338	11.8	7.6
816	5093	14.8	38.0	10.89	〃	44331	4467	4455	4199	26.8	25.6	4362	10.5	9.3
840	5098	14.0	32.6	71.79	〃	45331	4755	4674	4188	56.7	48.6	4352	40.3	32.2
843	5092	16.1	35.0	57.17	〃	45836	4760	4696	4216	54.4	48.0	4380	38.0	31.6
819	5091.1	17.2	36.2	6.61	〃	45182	4539	4531	4231	30.8	30.0	4394	14.5	13.7
822	5090	19.2	34.0	1.98	〃	47430	4749	4747	4258	49.1	48.9	4421	32.8	32.6
825	5089	22.3	32.7	2.94	〃	48313	4840	4837	4299	54.1	53.8	4462	37.8	37.5
827	5088	24.2	32.0	3.71	〃	49197	4931	4927	4325	60.6	60.2	4488	44.3	43.9
830	5087	26.8	31.0	22.68	〃	49162	4986	4961	4360	62.6	60.1	4522	46.4	43.9
832	5086	28.8	30.3	41.59	〃	48949	5023	4977	4386	63.7	59.1	4549	47.4	42.8
834	5085	30.7	31.2	5.06	〃	49389	4955	4949	4412	54.3	53.7	4574	38.1	37.5
837	5084	33.3	32.8	5.96	〃	48459	4864	4858	4447	41.7	41.1	4609	25.5	24.9
Kagoshima M.O. *	5044	34.4	33.1		III 30	48318			4461			4624		

* Meteorological Observatory, near the well in the observation field.
B.M. printed in Gothic type are 2nd order bench marks.

Synoptic Results for Kagoshima Prefecture (IV).

B.M.	No.	φ	λ	H (m)	Date 1954	g 979.	g_0 979.	g_0'' 979.	HELMERT Formula of 1901 γ_0 979.	HELMERT Formula of 1901 Δg_0 (mgal.)	HELMERT Formula of 1901 $\Delta g_0''$ (mgal.)	International Formula γ_0 979.	International Formula Δg_0 (mgal.)	International Formula $\Delta g_0''$ (mgal.)
		31° ′	130°′											
2489	5035	40.6	48.9	2.29	III 29	48775	4885	4882	4545	34.0	33.7	4707	17.8	17.5
2491	5034	38.5	49.2	5.70	〃	48467	4864	4858	4517	34.7	34.1	4679	18.5	17.9
2494	5033	35.8	47.3	5.97	〃	48340	4852	4846	4480	37.2	36.6	4643	20.9	20.3
2497	5032	33.4	45.8	6.81	〃	47914	4812	4805	4448	35.4	35.7	4611	20.1	19.4
2500	5031	33.1	42.1	20.56	〃	47247	4788	4765	4444	34.4	32.1	4607	18.1	15.8

2502	5030	31.5	42.2	3.06	〃	47665	4776	4773	4422	35.4	35.1	4585	19.1	18.8
2504	5029	29.6	42.1	4.27	〃	47269	4740	4735	4397	34.3	33.8	4560	18.0	17.5
2506	5028	27.7	42.2	5.62	〃	46435	4661	4655	4372	28.9	28.3	4534	12.7	12.1
2508	5027	26.6	44.2	3.32	〃	47620	4772	4769	4357	41.5	41.2	4520	25.2	21.9
2510	5026	24.9	45.7	10.00	〃	47712	4802	4791	4334	46.8	45.7	4497	30.5	29.4
2512	5025	23.6	46.8	128.10	〃	45335	4929	4786	4317	61.2	46.9	4480	44.9	30.6
2514	5024	22.6	48.9	64.72	〃	46905	4890	4818	4303	58.7	51.5	4466	42.4	35.2
2516	5023	23.0	51.3	21.21	〃	47450	4811	4787	4309	50.2	47.8	4472	33.9	31.5
2518	5022	23.1	53.8	56.84	〃	45995	4775	4711	4310	46.5	40.1	4473	30.2	23.8
9120	5021	23.4	55.9	51.63	〃	45733	4733	4675	4314	41.9	36.1	4477	25.6	19.8
9122	5020	23.5	58.1	20.15	〃	46529	4715	4693	4315	40.0	37.8	4478	23.7	21.5
			131°											
9124	5019	24.8	00.0	28.40	〃	45938	4681	4650	4333	34.8	31.7	4496	18.5	15.4
9126	5018	26.1	01.9	28.74	〃	45807	4669	4637	4350	31.9	28.7	4513	15.6	12.4
9128	5017	27.2	04.0	7.89	〃	46480	4672	4664	4365	30.7	29.9	4528	14.4	13.6
9130	4844	28.4	06.0	10.07	II 16	46526	4684	4672	4381	30.3	29.1	4544	14.0	12.8
9131	4843	28.6	07.0	48.39	〃	45473	4697	4643	4384	31.3	25.9	4546	15.1	9.7
9133	4842	27.8	08.6	6.61	〃	46335	4654	4647	4373	28.1	27.4	4536	11.8	11.1

ウォルドン重力計による日本全国の重力測定
第九報 (九州地方)

坪井忠二・実川 顕・田島広一

これは，九州地方538点における重力測定結果をまとめたものである．測定と計算との方法は，第1報に述べてあるのとほとんど同じであるから，ここにはくりかえさない．結果は第IV表～第VIII表（ルート別），第IX表～第XV表（県別）に示してある．ブーゲー異常の分布は，第3図にくわしく示してある．第4図はその略図である．

これらの図からわかる主なことがらは，次のとおりである．

1) ブーゲー異常は，大きくみて，西方と北方とへ向かつて大きくなつている．例えば +30 ミリガルの線は，西と北との海岸線にほぼ平行に走り，それよりも外側，すなわち海側では，異常は大きくなる．五島列島の数点における熊谷教授の測定結果も，このことを示している．黄海の深さはせいぜい数100 mであつて，ここは“海”であるよりは“陸”であると考えられていた．しかし，ブーゲー異常が黄海海岸に向かつて増していることからみると，この考えは正しくないのかも知れない．

中国大陸における R. P. LEJAY の測定結果も，ブーゲー異常がやはり黄海々岸に向かつて増していることを示している．

以上の事実を綜合して考えると，黄海は実は“海”であるのかも知れない．そしてそれが浅いのは，楊子江が運び込む土砂が海底に厚く堆積しているからであるかも知れない．(第5図)．楊子江が運び込む土砂の量は，速水教授によれば 3×10^8 トン/年 である．この土砂が $5\times10^5 km^2$ の面積にわたつて散布されて，密度 2.0 の堆積層をつくるとすれば，その層の生長は 3×10^{-4}m/年 であつて，10^7 年の間には 3×10^3m になり得る．

2) 等異常線と九州西海岸線とはほぼ平行であるが，八代海でその平行性は破れ，高重力のリッジが西から東へ入り込んで，九州中軸に達している．この高重力のリッジは更に東に追跡することができるが，高重力そのものは減り，マイナスにさえなる．九州の中軸を過ぎると，このリッジの北側と南側とに，ブーゲー異常マイナスの地域がみられる．ここからリッジに沿つて東へ向かうと，ブーゲー異常はまた増す．このように，このリッジは九州を東西の方向に横切つている．ブーゲー異常はこのリッジから北方へ向かつて急に減る．中央構造線が走つているであろうと考えられていたのはこの地帯である．この地域は，火山噴出物によつて厚くおおわれているので，この構造線は地質学的には見にくいとのことであるが，重力測定の結果は明らかになにらかの構造線が存在していることを暗示している．小区域地震がこの地帯に多いことは注目に値する．

3) 九州北岸では，等重力線と海岸線とはほぼ平行である．この平行地帯と，前節の高重力リッジとの間は，ほぼ三角形であつて，その三角形の内においては，等重力線分布はだいぶ乱れている．この見方からすると，九州は第6図のように A, B, C の3つにわけられる．A では等重力線が北海岸線とほぼ平行，B では不規則，C では規則的にほぼ南北に走る．

北海岸線にほぼ平行な等重力線は，東の端でむきを急に北に変えて，中国地方の等重力線に自然に連なる．また B と C とを境する高重力リッジが，更に西へ黄海へまでのびている形跡はない．

4) C の内では，ブーゲー異常は東へ向かつて減つている．宮崎県の東海岸宮崎市の近くには，−72 ミリガルという点がある．そして等異常線はここを中心とした楕円形をなしており，地殻のいちじるしい陥没を示している．顕著地震・稍顕著地震が，この近くに頻発することは注目に値する．

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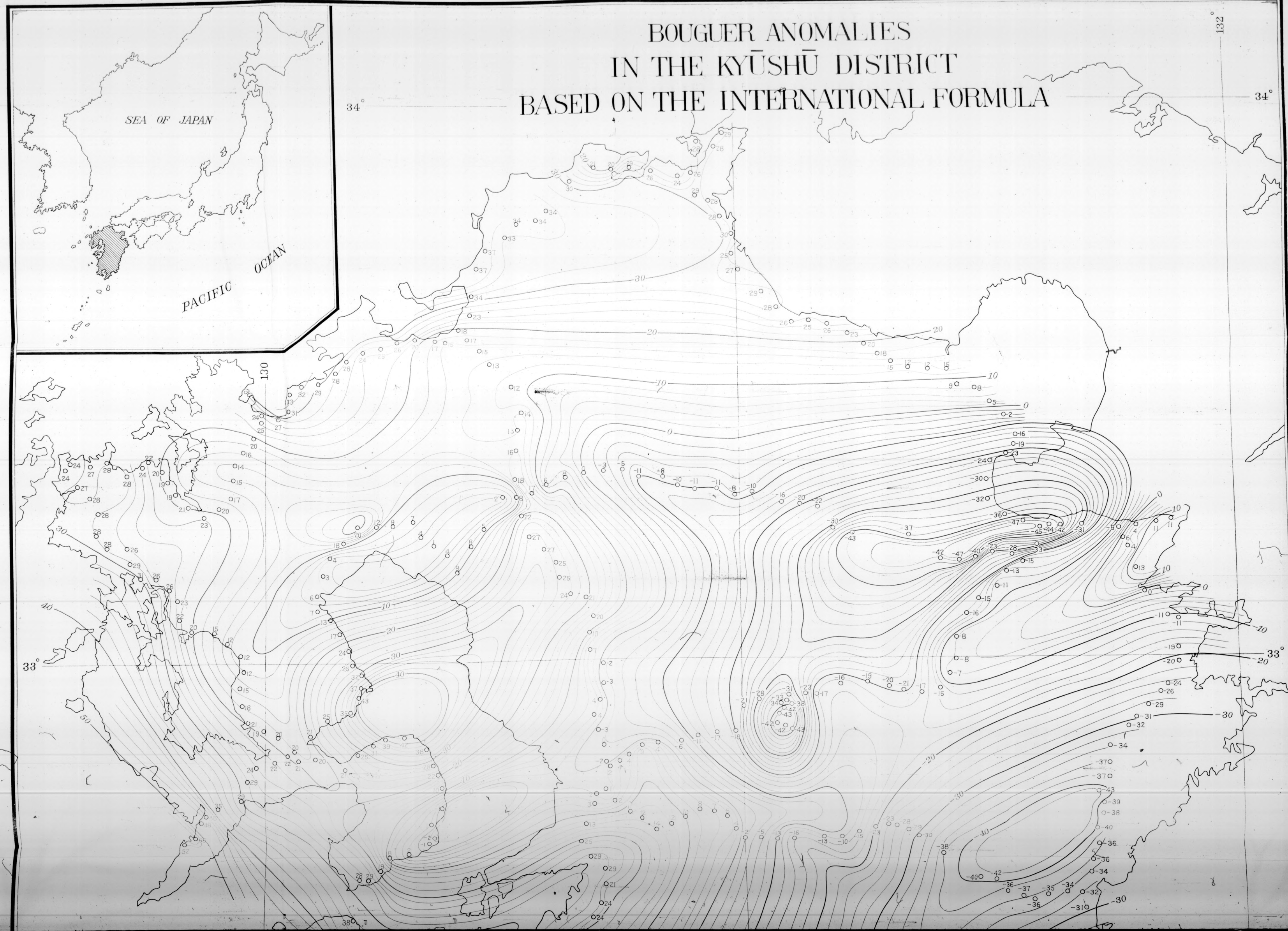
BOUGUER ANOMALIES IN THE KYŪSHŪ DISTRICT BASED ON THE INTERNATIONAL FORMULA



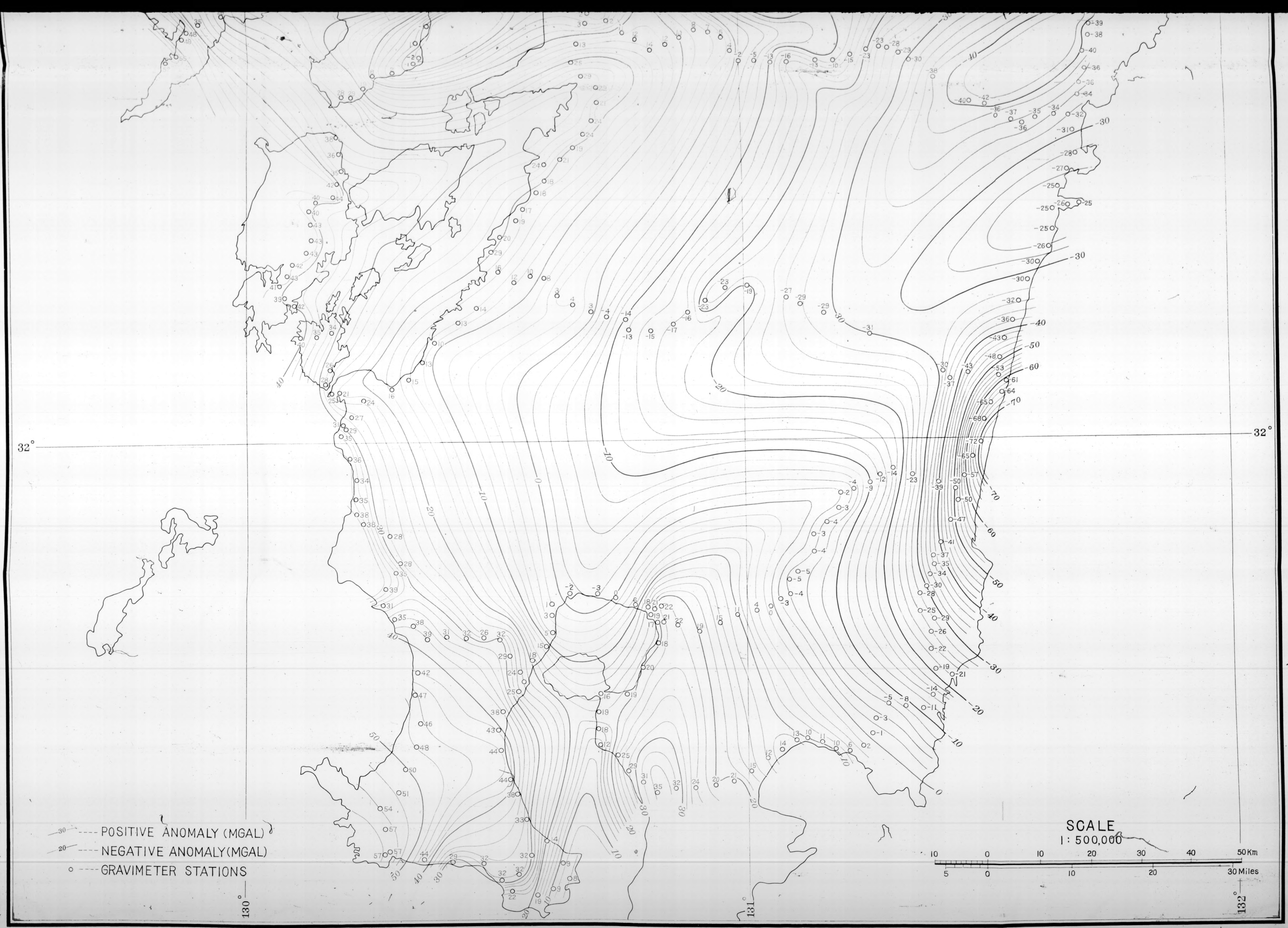


Fig. 3. BOUGUER Anomalies in the Kyūshū District based on the International Formula. (mgal.)

ウォルドン重力計による日本全国の重力測定
第九報 (九州地方)

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これは，九州地方538点における重力測定結果をまとめたものである．測定と計算との方法は，第1報に述べてあるのとほとんど同じであるから，ここにはくりかえさない．結果は第IV表～第VIII表（ルート別），第IX表～第XV表（県別）に示してある．ブーゲー異常の分布は，第3図にくわしく示してある．第4図はその略図である．

これらの図からわかる主なことがらは，次のとおりである．

1) ブーゲー異常は，大きくみて，西方と北方とへ向かつて大きくなつている．例えば +30 ミリガルの線は，西と北との海岸線にほぼ平行に走り，それよりも外側，すなわち海側では，異常は大きくなる．五島列島の数点における熊谷教授の測定結果も，このことを示している．黄海の深さはせいぜい数100 mであつて，ここは“海”であるよりは“陸”であると考えられていた．しかし，ブーゲー

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